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## CONTENTS

	PAGE
Editorial Notes	497
What is Nationalisation?	499
Railways and Town Planning	500
The Central Uruguay Railway	501
Sir Alan Mount's Annual Report	501
Letters to the Editor	504
Publications Received	505
The Scrap Heap	506
Overseas Railway Affairs—South Africa, India, Costa Rica, France, Czechoslovakia	507
The Jamaica Railway, 1845-1945	508
Modern Methods of Handling Goods at Railway Stations	510
A Modern American Marshalling Yard	511
Personal	515
Central Argentine Railway Limited Meeting	517
L.M.S.R. Manor Road Crossing, Grays, Accident Report	519
Notes and News	522
Stock Market and Table	524

## TO CALLERS AND TELEPHONERS

Until further notice our office hours are: Mondays to Fridays 9.30 a.m. till 5.30 p.m.  
 The office is closed on Saturdays

## ANSWERS TO ENQUIRIES

By reason of staff shortage due to enlistment, we regret that it is no longer possible for us to answer enquiries involving research, or to supply dates when articles appeared in back numbers, either by telephone or by letter

## ERRORS, PAPER, AND PRINTING

Owing to shortage of staff and altered printing arrangements due to the war, and less time available for proof reading, we ask our readers' indulgence for typographical and other errors they may observe from time to time, also for poorer paper and printing compared with pre-war standards

## Steel Price Rise Likely

IT is believed likely that steel prices in both the bulk and finishing sections of the industry will be raised shortly. In some quarters the range of the possible increase is put at between 5 per cent. and 10 per cent. For some time it has been realised that the outgoings of the Ministry of Supply's Central Fund have exceeded the income from the levy, and in the finishing sections of the industry it is obvious that costs are rising with the end of long-run war contracts. Any increase in the price of steel would add to the burden which is being carried by the railways, and will have its repercussions on the export trade of a wide range of railway supply industries. Coal and labour costs already are at a high level, and present indications give little hope for a substantial easement in the near future. It cannot be overlooked that production costs, into which wages, coal, and steel prices all enter largely, ultimately are the crux of the problem of increasing our export trade. At base, the higher wage rates which have come into being during the war are responsible in large part for the higher costs in both coal and steel. The increase in the cost of coal tends to be cumulative, because it has its reflection in so many facets of production. So far there has been no serious attempt to link higher wage rates with greater productivity, but unless this can be done, the outlook is unpromising.

\* \* \* \*

## Colonial Engineering Service

In May last advertisements appeared in the press announcing that the recruitment for the Colonial Service of engineers normally required to possess academic or professional qualifications would thenceforward be undertaken by the Director of Recruitment (Colonial Service), instead of by the Crown Agents for the Colonies. This change in procedure was merely a corollary to a more important decision of the Secretary of State for the Colonies, namely, the creation of a Colonial Engineering Service. It had been asked from time to time why there should be similar services for doctors, lawyers and so on, but not for engineers; why the method of recruitment should be different; and why engineers recruited for pensionable posts should be appointed on agreement whereas others were appointed on probation. The establishment of a Colonial Engineering Service removes all traces of any discrimination which may have been thought to exist. Moreover, although engineers, in common with other professional men, will be appointed to individual colonies and will be the servants of the colonial governments concerned, the eligibility of engineers for subsequent transfer on promotion from one colony to another will be more apparent than heretofore by reason of their being members of the Colonial Engineering Service.

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## Asking the Public

The Southern Railway has now issued the results of the questionnaire put to its passengers who visited the post-war passenger coach which was on view at Waterloo and Victoria Stations during the first week of October and which was described and illustrated in our October 12 issue. The number of visitors who inspected the coach was 25,000, of whom 2,000 sent in detailed answers to the points on which their views were canvassed. An analysis of the result is given below:

	Unqualified approval	Criticisms	Unqualified approval	Criticisms
Seating	1,278	693	Windows	1,340
Fittings	1,181	659	Lavatories	1,312
Lighting	1,334	482	Mirrors	1,169
Luggage	1,010	468	Decoration	1,266
Ventilation	992	348	Heating	115
Doors	1,231	337		

On the question as to preference for compartment coach or open saloon the result shows a preponderance of three to one in favour of the former type of coach, and is a definite confirmation of the insular nature of the English character and requirements. The answers received in relation to the type of seat were so varied that the Southern Railway considers it probable that a seat which will be accorded universal favour is rather beyond achievement.

\* \* \* \*

## Indian Government Railways

In recent issues we have recorded certain changes in designation of railways in India. Of these, the most important concerns the title Indian State Railways, which has been applied for many years to the railways under the Government of India, and which is being replaced by that of Indian

Government Railways. The abbreviation I.S.R. is giving place to I.G.R. The change-over will enable a better differentiation to be made between Government railways and those operated by Indian States, for example, the Jodhpur Railway, the Bikaner State Railway, and the Mysore State Railway. The other recent changes in title refer to the Bengal & Assam Railway, which henceforth, according to an official notification issued by the Government of India, is to be known as the Bengal Assam Railway; and to the Oudh & Tirhoot Railway, which is to be designated the Oudh Tirhoot Railway. Both these railways are comparatively new entities; the Bengal & Assam Railway came into being as such as the result of the Assam-Bengal Railway being acquired by the State on January 1, 1942, and combined with the Eastern Bengal (State) Railway; the Oudh & Tirhoot Railway was formed, and so designated, on January 1, 1943, when the Bengal & North Western Railway and the Rohilkund & Kumaon Railway became the property of the Government of India, and were amalgamated.

#### Central Argentine Railway Meeting

The address of Lord Forbes, Chairman of the Central Argentine Railway Limited, at the annual general meeting of the company last week, had been awaited with the more interest because it was the first of the current series of speeches by the Chairman of the British-owned Argentine railway companies. As will be seen from the report of his speech elsewhere in this issue, Lord Forbes gave an account of the steps which had been taken to strengthen the representation of the companies in the Argentine so as to enable more immediate action to be taken in the common interest on matters concerning policy. It was made clear, too, that the arrangement concluded by Sir Montague Eddy last year has enabled the company to offset increased wage costs by the advance in tariffs. The principal pre-occupation of the directors of the railways continues to be the impending expiration of the Mitre Law, under which the railways enjoy certain tax concessions. As the law is due for expiry at the end of next year, and as it is estimated that, on the present basis, the loss of these concessions might add a burden of some 27,000,000 pesos, or £1,700,000, to the British-owned railways, it is clear that time is running short for the agreement of plans for the future of the railways.

#### Relaxing U.S.A. Wartime Travel Restrictions

By mid-August a considerable easing had taken place of wartime restrictions in the United States on passenger travel. It became possible once again to run additional seasonal trains to holiday resorts, though special excursion trains were still prohibited save under a permit from the Office of Defense Transportation. Railways were permitted to restore to their timetables trains which, from November, 1944, had been withdrawn because of their seat occupancy averaging less than 35 per cent. of their available space. Extra sections of regular services were allowed once again, provided that such additional trains were made up of stock normally used in military service, which otherwise would be run empty back to the point of the next military assignment. Restrictions were removed on the holding of fairs, and on the transport of race-horses and other show animals, and on travel by professional, college, and high school athletic teams. There was some relaxation, also, of the ban on conventions, for it was laid down, on August 17, that such meetings might be held provided that the persons requiring travel accommodation to attend the convention did not exceed 150 in all, in place of the previous 50.

#### A Bid for the Pullman Assets

A definite bid has now been made for the assets of the Pullman Company by the investment firm of Otis & Co., of Cleveland, Ohio. It will be recalled that Pullman, Incorporated, as a result of the anti-trust suit brought against it by the Federal Government, was ordered to dispose of either its sleeping car services or its car manufacturing, and elected to do the former. An offer to sell the assets of the sleeping-car business to a consortium of the railways was not accepted, but the Otis offer is of approximately the same total, \$75,000,000, and on much the same terms. In detail, it amounts to roughly \$35,000,000 for the 600 modern lightweight cars in the Pullman pool, \$20,000,000 for 6,250 heavyweight cars, averaging over 25 years of age, \$5,000,000 for shops and laundries, and \$15,000,000 for working capital and supplies. In the proposal filed with the Federal Court at Philadelphia, the Otis Company, stressing the necessity for prompt action, gave a guarantee of the continuance of the Pullman service without interruption, and of the protection of all Pullman employees. It pointed out that at least \$500,000,000

must be expended in the near future on the purchase of new lightweight stock, to replace the outmoded heavyweight standard cars, if effective competition is to be waged against air transport, and that for the same reason it is essential that the present breaks-of-journey at Chicago and St. Louis should be replaced by through transcontinental car workings. New types of equipment are needed, at lower costs to the passenger, as well as an intensive advertising campaign to popularise the service.

#### Impact Tests on Bridges

With the help of electro-magnetic strain gauges, a research committee of the Association of American Railroads recently has been conducting tests to measure the impact stresses produced by moving trains on bridges of 20 to 34 ft. span, at speeds up to 85 m.p.h. with steam and 100 m.p.h. with diesel-electric locomotives. A total of 900 tests was made, on four different railways, in a variety of conditions, such as open-deck and ballasted-deck spans, bridges with or without battered rail-joints at or near the centre of the span, and so on. Contrary to expectation, it was found that the maximum impact stresses resulting from battered joints was not at high speeds, but at between 30 and 50 m.p.h. with steam locomotives and 20 to 40 m.p.h. with diesels. The rolling effect of locomotives at speed added an average of 17 per cent. to the recorded static stresses with the diesels and 23 per cent. with the steam locomotives. In general, on both open-deck and ballasted-deck spans, impact stresses due to the passage of steam locomotives were 30 per cent. of the static stresses at 10 m.p.h. and under, and 75 per cent. at 50 m.p.h. and over, whereas with diesel locomotives the corresponding figures were 20 and 50 per cent., except that on the open-deck bridges the 50 m.p.h. fell to 30 m.p.h. Between these limits of speed there was a straight line variation in the impact effects. The most striking result obtained was that the average static stresses measured were found to be about 90 per cent. on open-deck and 80 per cent. on ballasted-deck bridges of those calculated, and as an outcome of this discovery it is regarded as safely practicable to design lighter structures in future.

#### Beyer Peacock & Company in the War

The recent war made unprecedented demands on the production resources of the British locomotive building industry, and because of this it was necessary to set aside non-priority orders and to abandon all but essential war work. Beyer Peacock & Co. Ltd., and its associated companies, have produced an attractive volume which is being sent to the company's railway connections overseas, explaining the part played in the war by the group. A review appears in our "Publications Received" columns. As might be expected, space is devoted to the production of tanks, gun mountings, bombs, shells and similar armaments, but very wisely the company has given a good deal of detail about the many locomotives it produced during the war, and the excellent service they provided in many parts of the world. Public gratitude for war efforts is all too short, and it is well that the overseas administrations should have before them facts relating to the primary business of the group, the building of locomotives. Railways which have had to wait for locomotive replacements because of concentration of British builders on war production of all kinds, will appreciate from the booklet the wide scope of Beyer Peacock's activities in the Allied cause. Their most pressing anxiety, however, will centre on locomotive matters, and there can be no doubt that the informative chapter on the locomotives supplied during the war, and the developments brought about by war needs, will hold their attention, and should further the nation's export effort.

#### Aluminium Tank Wagons for Corrosives

In 1928, a bogie tank wagon was built in the United States in which aluminium was substituted for steel in the fabrication of the 8,000-gal. tank. This wagon was designed originally for the conveyance of glacial acetic acid, and since then has travelled 408,000 miles with more or less corrosive contents throughout, chiefly glycerine. The behaviour of the aluminium in these conditions has been most satisfactory. The only repairs or modifications required during this 17 years' service have been the replacement in 1930 of the original four lines of aluminium heating pipes by six lines; heater pipe repairs and painting in 1936; further pipe repairs and light maintenance in 1938; the application of new drawgear and a little painting in 1941; and a change of brakes to the standard "AB" type, as required by the Interstate Commerce Commission, and painting in 1945. Aluminium is

also specially fitted to withstand the corrosive action of hydrogen peroxide, formaldehyde, nitric acid, and similar compounds. Many additional aluminium tank wagons have been built since, and in addition to their corrosion-resisting qualities, the saving of 8,300 lb. in the wagon tare, as compared with an all-steel wagon, is no mean advantage. An aluminium-manganese alloy is used, and the latest wagons have all-welded tanks.

#### L.M.S.R. Mechanised Goods Sheds

The recent opening of the L.M.S.R. mechanised goods sheds in Lawley Street, Birmingham, and at Derby-St. Mary's has directed attention to the novel methods introduced and given rise to considerable interest amongst those whose function it is to operate railway freight traffic. For this reason the lucid and descriptive address given before the Institute of Transport on these new methods on November 12, referred to elsewhere in our current issue, by Mr. T. W. Royle, a Vice-President of the L.M.S.R., is the more welcome. Mr. Royle has been closely identified with the researches and planning which has resulted in the directors of the company embarking on these two enterprises which can and must prove of inestimable benefit to the two trading and industrial communities they serve. The improvements which have been introduced in these new sheds may not be the final word in goods traffic handling, but what has been accomplished there no doubt represents a marked advance on the methods hitherto followed by railways in this country.

#### A Gateman's Failure

The accident which occurred at the Manor Road Crossing, Grays, on the L.M.S.R., on June 14, 1945, when a lorry was run down and two men travelling in it fatally injured, was due to the gateman—as he frankly admitted—opening the gates after "train in section" had been signalled, without obtaining permission from the signalman at West Thurrock Junction. He also opened first the gate at which the lorry was waiting, which was another infraction of the rules. He crossed over in front of the vehicle to open the other gate and, after closing it, saw a second lorry coming, with the train too near for him to get back over the line. His warning gestures were without effect and the lorry, which was not seen from the engine to be foul of the track until the last moment, was struck. This case is one more instance of how easily any departure from the rules at such a location can have grave consequences. In his report, a summary of which appears at page 519, Lt.-Colonel E. Woodhouse recommends that unless the proposals, made before the war, to erect a bridge, are to be carried to completion soon, the crossing equipment should be modernised; industrial development nearby has brought about a considerable increase in road user and much consequent delay, as the railway itself carries a fairly heavy traffic.

#### New "Mountain" Type Engines in Spain

Many sections of the Spanish National Railways abound in steep gradients, often with the additional handicaps to the economical working of the traffic presented by curves of comparatively short radius. The main-line trains, especially those forming part of international services, are frequently heavy and powerful locomotives are required to handle the loads at a reasonable commercial speed. Although some fine machines were put to work in previous years the onerous conditions often rendered double-heading unavoidable. The mechanical engineering department was therefore led not long ago to look into the question of designing a new express locomotive capable of hauling fast trains of 500 tonnes over the most difficult sections. It was decided to use the 4-8-2, or "Mountain," wheel arrangement, already successfully used in Spain, and to take certain parts of a "Santa Fe" type of engine, which had proved so satisfactory in service, with a view to maintaining as great a degree of standardisation as possible. The new locomotives, built by that well-known firm of La Maquina Terrestre y Maritima, of Barcelona, have a fine appearance, and have given an excellent account of themselves on trial runs over the old Norte main line between Madrid, Avila and Valla lolid.

#### Auxiliary Power for Locomotives

It is claimed by the protagonists of steam power in the United States that locomotives of the latest types, such as the Pennsylvania "T1" 4-4-4-4 class with poppet-valves, or the Norfolk & Western "600" class 4-8-4s, not only can be

built for less than half the cost of a 5,400-b.h.p. freight diesel or 6,000-b.h.p. passenger diesel, but that at speeds of over 26 to 30 m.p.h. can be relied on to give a performance superior to that of the diesel-electric power. Similarly the new Pennsylvania turbine-driven 6-8-6 locomotive No. 6200 cannot develop its maximum drawbar h.p. until a speed of over 40 m.p.h. has been reached. In a letter to the *Railway Age*, a correspondent asks why the principles of reciprocating motion and turbo-electric propulsion cannot be combined in a single locomotive, so as to derive the maximum benefits from both. His idea is that the steam-producing capacity of the modern boiler is sufficient, in the lower ranges of speed, to provide a surplus which could be harnessed to drive a 400-b.h.p. turbo-electric generator, the current from which would drive the tender wheels through suitable motors, so providing auxiliary power for starting and heavy grade work. The electricity thus made available might be used also to operate draught fans, in which event it might be possible to exhaust from cylinders and turbine at somewhere near atmospheric pressure. The modern American tender, with its loaded weight of 150 to 200 tons, would have ample adhesion for its wheels to take up the turbo-electric power thus developed.

#### What is Nationalisation?

**A**CCORDING to the political correspondents of a number of the daily newspapers, more nationalisation plans are being prepared by the Government to cover a wide range of important British industries. It is freely reported that the nationalisation of transport will take place in the current session of Parliament, although so far no details have yet been advanced as to what form and how widely embracing the plan envisaged by the Government will be. When the Chairman and Vice-Chairman of the Road Haulage Association, together with the Chairman of the Hired Vehicles and Controlled Undertakings Central Panels met the Minister on November 6, the Minister stated that no final decision had been taken yet on nationalisation of Inland Transport by the Cabinet. He expected that a decision would be reached in the near future, and it was arranged tentatively that a further meeting should be held between the parties on November 26. The obvious inference is that by that date Cabinet decisions will have been taken.

In the current issue of *The Railway Stockholder*, Mr. Richard Thomas, who was formerly Chief Inspecting Engineer in London to the Egyptian Government, has contributed an interesting article, in the course of which he points out that "Nationalisation," "Public Ownership," "Socialisation," and "Private Enterprise" are now used so frequently and so loosely that some attempt should be made to establish the meaning of each, and to differentiate between them.

Putting the last first, "Private Enterprise" presents the least difficulties. It implies the activity of a group (or groups) of persons who band together financially to promote some trade or industry from which to gain a return from the money they invest in it. "Nationalisation" implies that an industry or service becomes the property of the nation, which undertakes its administration as a Department of State. "Public Ownership" implies ownership by the general public, but beyond that point nothing about it seems to be settled. By implication, Mr. Thomas suggests, the term would mean ownership by the people as a whole, in which case the proper expression would seem to be "communal ownership." If that is not what is intended, the position might be elucidated by an explanatory statement indicating what is meant and describing the financial and operational scheme envisaged. "Socialisation," hitherto undefined, would appear to be the same as "nationalisation."

Mr. Thomas goes on to examine in more detail some examples, and endeavours, by analysis and comparison, to locate the essential differences in principle and practice. The perfect example of "nationalisation," he suggests, is the General Post Office. This institution is entirely State-owned and operated. It has no fixed basis, but is financed from the general State funds, from which working expenses are drawn, and into which receipts are paid. These transactions are budgeted for annually, as part of the State finance. Control is vested in a Minister responsible to Parliament, but the actual administration is a Civil Service department. The nation theoretically exercises its proprietorial rights through a kind of remote Parliamentary control. Subject to this somewhat vague authority, the Post Office enjoys complete liberty of

action. It is impossible to guess, except by inference, whether or not it is run efficiently from a commercial business standpoint, as the only information available is a sketchy outline of its finances given at the time of the budget. Incidentally, as Mr. Thomas points out, the General Post Office is a ferocious monopoly, which savagely protects itself and its ancillary offspring from competition by the simple means of making it an offence against the law to enter into competition with it. It exercises its monopolistic rights to the limit in fixing its rates and charges at will, and these bear little relation to the cost of services rendered.

"Public Ownership," of which an often quoted example is the London Passenger Transport Board, is an entirely different matter. The Board has a basis of capital; it has three kinds of stock, of which the first two are fixed interest bearing, and the third is an equity, all of which are quoted on the Stock Exchange. Its assets are the property of the capitalists, who have subscribed the money and hold the stocks. The difference between the Board and any other industrial undertaking is that its Board of Directors is nominated by the Government, and is not appointed by, or responsible to, the proprietors. The Board thus escapes the disagreeable necessity of having to appear, once a year, to account for itself to the stockholding proprietors.

Mr. Thomas finds that there is one example of a genuinely publicly owned business, of which each British citizen is a shareholder—the United Kingdom Commercial Corporation. This wartime institution carries out, it is believed, vast commercial transactions. It is not an industry or a service, it is purely a Trading Corporation. Its only shareholder is the Treasury, which finances it out of public funds to which all, by direct or indirect taxation, subscribe. It does not publish a balance-sheet of capital assets and liabilities, or a profit and loss account. Public shareholders have no knowledge of or control over its activities.

None of the examples cited, Mr. Thomas contends, approaches the ideal of a nationally-owned undertaking, combining efficient business management with an all-pervading sense of responsibility to the general public interest. He suggests that the last of the three is nearest, but it could be brought much nearer by bringing it out into the open, disclosing properly audited statements of income and expenditure, and profit and loss, and a balance-sheet of capital assets and liabilities, such as are demanded by law of ordinary public companies. If a business be owned by the Government, it is so owned on behalf of the people, and the people have as much right to the observance of commercial principles and efficiency in the management of their property as any other kind of shareholder.

The conclusion which Mr. Thomas reaches in his search for definitions is, that (a) a "nationalised" undertaking is one in which the State assumes full financial and operational control, functioning as a Government Department, on a non-capital basis, and (b) a "publicly-owned" undertaking is one owned by the public, as a whole, but functioning on a capital foundation as an independent entity, controlling its own finance and returning its distributable profits to the Treasury as revenue. He thinks that a solution might be found in a communally-owned industry, operating as an independent unit, financially separated from the State, but administered strictly according to the provisions of the general commercial law of the land, and not under any further Treasury control than is exercised over other commercial enterprises.

### Railways and Town Planning

FOR the post-war reconstruction period, many and elaborate plans have been prepared, involving the extensive rebuilding of large urban areas (some of them bomb-damaged, but others envisaged for demolition) and the recasting of their transport facilities. Some of these plans have been noticed in our columns at the time of their publication. In many quarters it seems to be assumed that, for the first time, the provision of railways and the planning of a town are being considered as inter-related parts of a whole, but a study of railway development and of urban improvement—in the London area, for example—clearly demonstrates that this is far from being an accurate impression.

Some time ago we became possessed of a photographic album, assembled by a resident engineer during the construction of the sections of the Inner Circle railway in London (Metropolitan and Metropolitan-District Railways) some 80 years ago, and this showed in graphic fashion how this work was associated with urban improvement. The Victoria Embankment is an outstanding example, as also is Queen Victoria Street, Tothill Street, in which are the offices of *The Railway Gazette*, owes its present form and width to the same railway works. This week we publish the first of a series of reproductions of these old construction views, in which there are many features of interest. The whole of the line from Paddington to Mansion House was authorised by Parliament on July 29, 1864, but, whereas the western portion (Praed Street to South Kensington) was sanctioned to the existing Metropolitan Railway, the southern portion (Kensington to Mansion House) was to be built by a separate company—the Metropolitan-District Railway—incorporated on the same day as the new powers were granted.

### The Railways of Jamaica

JAMAICA is one of the four islands constituting the Greater Antilles. It lies in the Caribbean Sea 90 miles from the southern end of Cuba, and 540 miles from the Colon entrance to the Panama Canal. The island is 144 miles long, and its greatest width is 49 miles. Of its total area of 4,193 sq. miles, only 646 sq. miles are flat land, with the rest either hills or mountains which in large part are impossible to cultivate. The principal transport facilities are provided by the Government Railway, which is noteworthy for being the earliest colonial railway of the British Empire. Details of the history of railways in Jamaica are difficult to trace, partly because of the many changes in ownership, but principally because of the earthquake in 1907 which destroyed most of the records. The subject is of particular interest at the present time, as the Jamaica Government Railway has just reached its centenary; its early days form the subject of a short article by Mr. Fox, the present General Manager, which we publish in this issue.

It appears that the first part of the line was projected in 1843. During the construction of the first section, railway projects for Jamaica which were being placed before the investing public in England during the time of the Railway Mania assumed extraordinary proportions. There were at the time no fewer than six schemes projected, with a total suggested capital of £3,500,000 for an aggregate length of 300 miles. In addition to the above six, there was also mentioned in the early part of 1845 the Jamaica Southern, Eastern & Northern Railway, which was to run from Kingston to Montego Bay, although the exact route is not now known. The capital for this ambitious scheme was to be £1,500,000. Toward the end of 1845, the British Government instituted a strict supervision over all proposals for railways in the colonies, and thereupon all these schemes fell through with the exception of that of the Jamaica Railway Company.

Construction of the Jamaica Railway, projected by William Smith, of Manchester, England, in 1843, was begun in 1844. In the same year the prospectus of the company was issued, placing the capital at £1,500,000 in shares of £5 par value. The first section to be built was from Kingston through Spanish Town to Angels, a distance of 14½ miles. The estimated cost of the whole railway was slightly more than £150,000, an estimate which was found to be far too low, and the close of the year 1845 witnessed the completion of the railway only as far as Angels Station, at a cost in excess of £220,000. This section was opened on November 21 by the Governor of Jamaica, when a special train ran from Kingston to Spanish Town and back with the Governor on board. The maximum speed attained was 30 m.p.h. A second trip was made later in the day, during which trip an average speed of 28 m.p.h. was maintained. The speeds appear to have been higher than was considered safe in Jamaica at that time, as the following extract from a newspaper of December, 1845, indicates: "Isaac Taylor, the driver of the train on Sunday evening, was fined £2 for disobeying orders in having put the train at 40 miles an hour instead of 20, as he had been ordered, hereby causing great alarm and endangering the lives of the passengers, inasmuch as there was great risk of the train taking fire or some other accident occurring from the great rapidity of the motion."

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In 1867 an extension from Spanish Town to Old Harbour was built by the same company; the distance of 11 miles was completed at a cost of £60,000. In April, 1879, the Jamaica Railway Company was bought by the Government of the island for the sum of £93,932, although the property purchased represented a capital expenditure of upward of £267,000. As mentioned in Mr. Fox's article, the line was sold in 1890 to an American syndicate, which was required to extend it within stipulated periods, and was also given a land grant. The extensions were built, but, as earnings fell below expectations, the company defaulted on its bonds, and on August 16, 1900, under the powers reserved to the Government by the conditions of the Agreement, the line was forfeited, and the Supreme Court signed the order vesting the railway in the Government of the island. It has since been administered directly as a department of the Government.

### The Central Uruguay Railway

THE operating results of this company for the year ended June 30, 1945, are as under:—

	1943-44	1944-45	£
Gross receipts	£1,826,212	£1,868,458	+ 42,246
Working expenses	1,801,954	1,852,824	+ 50,870
Net receipts	24,258	15,634	— 8,624

The revenue account for the year was charged with a sum of £325,000 for essential renewals of permanent way. The debit balance of the net revenue account now totals £746,871. In face of the inadequacy of the net receipts to provide any surplus even for debenture interest, the company issued public notice on May 1, 1945, that the tariffs and fares would be increased as from August 1. At the same time a memorandum was handed to the Uruguayan Government offering, as an alternative solution to the company's difficulties, some revision of the bases of the concession under which the railway is operated. The Government then asked the company to formulate alternative proposals, and the following were put forward:—

(1) Direct purchase by the State.  
 (2) Re-establishment of a Government guarantee of income in return for the Government having the right to intervene in tariffs.

(3) Joint ownership of the undertaking by the Government and the present proprietors.

The tariff increases came into force on August 1. A few days later, the Government announced that it proposed to introduce legislation to take powers to fix the tariffs of all land and water transportation. This it did while the Commission was still sitting and had not reported on the company's proposals. Such a law, if passed, would deprive the company arbitrarily of one of the most valuable rights which it holds by virtue of its concession without proffering any compensation in return. The proposed law would also dispossess the Company of its main safeguard for the capital which the British public has invested on the strength of the concession.

The position at the moment appears to be somewhat obscure, but remembering the cordial relationships which have always existed between British industrial undertakings in Uruguay and the Government and the good international standing of the latter, it is hoped to be that a *modus vivendi* will be arranged whereby this happy state of affairs as between the Uruguayan railway companies and the Government will be perpetuated.

### Sir Alan Mount's Annual Report

A HANDSOME tribute to our British railways, their staffs and employees is paid by Sir Alan Mount, Chief Inspecting Officer of Railways, in his annual report for 1944 on railway accidents, recently issued and which again appears—although a printed and no longer a duplicated document—in the abbreviated form adopted in 1940. This is based on the system of reporting accidents laid down in the Railways (Notice of Accidents) Modification Order (Statutory Rules & Orders, 1939, No. 1214). "The exceptional nature and volume of wartime traffic," says the report, "coupled with the increase in ordinary passenger travel, caused many working difficulties which were accentuated by fog, heavy snowfalls, wide-spread frost, and sickness considerably in excess of the normal. The cumulative

effect of longer hours in traffic, heavier loads, and insufficient staff to repair and service engines, had a marked effect on their general condition, and the consequential increase in failures in traffic adversely affected operating efficiency." Notwithstanding these unfavourable conditions only 12 passengers and 8 servants lost their lives in train accidents in this country in 1944, although "there was an increase of 85 million passenger journeys on main-line railways compared with pre-war and passengers were carried some 13,500 million more miles. In other words, on the average, 90 million passenger-miles were worked every 24 hours over these systems, an increase of 68 per cent. As regards freight traffic, ton-miles also rose to 70 millions per day, an increase of 47 per cent."

The report again includes the instructive table, reproduced on page 502 and introduced in the report for 1941, analysing the various cases of train accident, properly so called, with the figures for 1943 (in brackets) for comparison. In these accidents, which numbered 402 against 393 in the previous year, 12 passengers, 8 servants and 14 other persons were killed, compared with 4, 5, and 5 in 1943. Failure of the human element resulted in 188 of the accidents (involving more than 3 hours delay) compared with 195 in 1943. Failure of train crews accounted for 58 collisions and 63 derailments, compared with 47 and 83 in 1943. "The rise in accidents," says the report, "due to mechanical failures of rolling stock and engines, namely, 83 in 1942, 92 in 1943, and 99 in 1944, is not surprising in the circumstances. It is of interest, however, to note that accidents caused by defective track and signalling apparatus diminished in number in these three years—24 in 1942, 22 in 1943, and 21 in 1944." Eight train accidents, as against three in the previous year, were the subject of a formal inquiry—others were dealt with by correspondence and consultation—and have been appropriately referred to in our columns. Two, those at Thurston, on January 12, 1944, and at the South Harrow Tunnel on October 30, 1944, were caused by the collapse of the crown of a steel firebox on an American engine. The previous report had included the similar accident at Honeybourne on November 17, 1943. In the last-named and the Thurston case the engineers had been misled by a false indication in a single water gauge the steam valve of which was only partially open. This is unlikely to occur with plug cocks, as used in this country, as the position of the handle indicates the condition of the cock, but on American engines the gauges have screw valves, the position of which can be determined only by test. After the Honeybourne accident warning instructions were issued, together with a drawing showing the position of the gauge and the test cocks provided in place of a second gauge, in relation to the fire-box crown, but unfortunately they had not reached the men concerned in the Thurston case, who failed to realise the necessity for additional care when manipulating the gauge valves to ensure that they are fully open.

At South Harrow Tunnel both men, who were fatally injured, were familiar with the type of engine and had signed a document as proof that they had seen the warning notices. No evidence suggested that there had been a false gauge indication and, as the engine was found to be mechanically sound, the shortage of water appeared to have been due to some mismanagement. American engines, the report emphasises, have since been withdrawn from the lines here for service overseas.

At Ilford, on January 16, 1944, in darkness and dense fog, an express passed a succession of signals at danger and ran into another in the station, with a loss of nine lives. Three of the signals passed were colour-lights, the first showing yellow, the other two red. The crew did not see the second at all and at the others the driver appeared to have been satisfied with vague assurances from his fireman that they were at clear. Fog block was being worked as the fogmen had not reached their posts. The report suggested that the inter-related questions of automatic train control and multiple-aspect signalling should be reviewed in the light of past and current research and an agreed policy determined. A recommendation to provide some detonator placers was accepted. Another collision occurred on the same route in fog at Romford on December 29, 1944, when fogmen were on duty and a passenger train, duly warned by detonator at a distant signal on starting from Gidea Park Station, nevertheless overran the following outer home—where another detonator was exploded—and intermediate home and ran into a goods train, killing the guard. Automatic train control of the warning type would not have prevented this accident. Factors in the case were the driver's exposure to frosty weather.

Causes	Type of accident					Total
	Collisions	Derailments	Running into obstructions	Fires in trains	Miscellaneous	
1. Failure of train crew (including guard) :—						
(a) Passing signals at danger ...	42 (28)	9 (20)	1 (—)	— (—)	— (—)	52 (48)
(b) Other irregularities or want of care ...	16 (19)	54 (63)	— (—)	— (—)	— (—)	70 (62)
2. Failure of signalman :—						
(a) Irregular block working ...	6 (7)	12 (16)	— (—)	— (—)	— (—)	6 (7)
(b) Other irregularities or want of care ...	12 (9)	12 (10)	— (—)	— (—)	— (—)	24 (26)
3. Failure of train crew and/or signalman and/or other staff ...	15 (12)	12 (10)	— (—)	— (—)	— (—)	27 (22)
4. Failure of other staff in operating department (excluding faulty loading ; see 10 below) ...	2 (5)	7 (3)	— (2)	— (—)	— (—)	9 (10)
5. Accidental ...	— (2)	3 (3)	— (1)	— (—)	— (—)	3 (6)
6. Defective drawgear ...	16 (16)	33 (25)	— (—)	— (—)	— (1)	49 (42)
7. Defective stock, other than drawgear ...	— (—)	38 (38)	— (—)	— (—)	— (—)	38 (38)
8. Defective engines ...	1 (1)	11 (11)	— (—)	— (—)	— (—)	12 (12)
9. Defective track and/or signalling apparatus ...	— (—)	21 (22)	— (—)	— (—)	— (—)	21 (22)
10. Faulty loading ...	— (1)	25 (25)	— (—)	— (—)	— (—)	27 (26)
11. Due to snow, landslides, flooding, etc. ...	— (—)	2 (—)	7 (—)	— (—)	2 (—)	9 (—)
12. Miscellaneous ...	4 (2)	38 (42)	6 (3)	6 (5)	1 (—)	55 (52)
Totals ... ... ... ...	114 (102)	265 (278)	14 (6)	6 (5)	3 (2)	402 (393)

when the locomotive was running tender first and the absence of landmarks in the section.

An unusual case of collision occurred at Dumfries on June 12, 1944, when a driver received clear distant signals at three locations and finding a starting signal at danger could not stop. His train was diverted to a branch line and struck a rail-motor. The distant signals had been pulled off as a result of a dis-engager—of a design now very little used and known as the Hellier & Gasson control—remaining wrongly in engagement after the falling-off of a balance weight, and recommendations for minor mechanical improvement to the gear were made.

Two derailments were inquired into. One at Wood Green, on August 29, 1944, was due to excessive speed on a curve at a fly-over junction ; re-arrangement of the track layout is to be considered. At Mossband, between Floriston and Gretna Junction, the accident on May 15, 1944, was found to be due to instability of track foundation, resulting in cumulative distortion and irregularities after the passage of a number of heavy trains at high speed. The subsoil at the location is wet and greasy clay, difficult to drain and leading to much trouble in maintenance. Extensive reconditioning had been in hand throughout the preceding day and on completion it was considered that the track was in good enough condition to be reopened to traffic without speed restriction. Twenty-three trains passed between that time and the derailment, the last four expresses with heavy engines travelling at 50 to 60 m.p.h. It was considered that, after such extensive maintenance work on an inherently bad foundation, a speed restriction should have been imposed until the track had been rolled into a more stable condition.

An unusual accident, associated with war conditions, was the explosion of a wagon load of some 10 tons of unfused bombs at Soham on June 2, 1944. A train of 51 sheeted open wagons similarly loaded was approaching the station when the driver observed that the leading wagon was on fire ; the flames had not yet reached the top. He stopped and the fireman uncoupled in rear of the wagon with a view to taking it into open country. The engine was restarted when the fireman rejoined it, but the fire had become a blaze and about 140 yd. further the explosion occurred with disastrous effects for some distance round, 6 minutes after the flames were first seen. The fireman and signalman were killed and the driver and two other railwaymen severely injured. The rear portion of the train was unaffected. No signalman had noticed anything amiss with it during its 20 mile run from March. The weather had been exceptionally dry for some weeks and the primary cause of the fire was probably a spark from the engine. Smouldering may have been in progress for some time until the wagon sheet, laid over the bombs contrary to regulations, suddenly burst into flame. Bulk sulphur had been conveyed a month before and its traces may have assisted to start and develop the fire. It is, however, remarkable to note that this was the first instance during the whole of the war of a serious explosion in a running train, "thus illustrating," the report observes, "the care generally taken to ensure that empty wagons are freed of inflammable material." Immediate reminders as to the importance of this precaution were issued. The prohibition applying to inside sheeting was also brought specially to the notice of the staff.

Turning to level crossing accidents, we find that there was no serious case to be referred to, as there had been in Sir Alan's previous report, and that the number of public road crossings remains unaltered at 4,360 ; the figure for occupation crossings, 22,600, is also unchanged. There were 64 serious casualties caused in 58 accidents, compared with 82 and 69, respectively, in 1943, and of those 47 were pedestrians. Ten service personnel were killed or seriously injured in five accidents, while traversing crossings, and the need for care on the part of service drivers, who are particularly liable to be driving in areas where they are not familiar with local conditions, is once more emphasised. When the casualties occurring generally on the roads are considered the dangers of level crossings, so much dwelt on in some quarters, are seen to be very small, and indeed negligible at public crossings where gates are provided. It is well known that motor vehicles are often driven into gates in broad daylight, revealing an extraordinary lack of care on the part of many road users.

During 1944, 315 inquiries were held into accidents other than train accidents, involving fatal or other serious injuries to 321 persons, nearly all railway servants ; the remainder were principally contractors' servants and persons at work or transacting business on companies' premises. As a result, 83 recommendations were embodied in the reports, of which 70 were adopted and 10 not adopted ; three are still under consideration. As usual, a considerable number of verbal suggestions were made and accepted. Movement accidents to passengers, of course, were due mainly to misadventure, want of caution or misconduct, and there is very little that the railways can do that could affect this position. Greater interest attaches to the accidents which befall men working on the track in which practically all cases of injury may be assumed to be reported.

Work was seldom carried out during the blackout unless the line was closed to traffic, so that fairly direct comparison is possible with pre-war times. Casualties were the same, 69, as in 1943, comparing favourably with the average of 78 and 71 for the periods 1935-1939 and 1940-1944, but the proportion of fatalities has been higher in recent years. "Want of personal care," the report states, "still continues to be the greatest source of accidents to men and women working on the permanent way." Cases attributable to this cause amount to 72 per cent. of the total, somewhat higher than the 1940-1944 average of 70 per cent. The casualties may be divided into two categories. The men were either aware that a train was approaching, or may not have realised their danger, although it was considered, on investigation, that they had ample opportunity of doing so without aid from a look-out. We find that the report dwells once again on the great importance of strictly observing Rule 234 (a), a rule read to the staff at regular intervals, and observes that "it is regrettable that disregard of this rule resulted in 10 serious casualties during track examination, which is work restricted to gängers and senior men," and continues :—"to extend the educational value of inquiry reports, every possible means should be taken to disseminate as widely as possible information regarding the circumstances of accidents. The distribution of safety literature, which is now curtailed by

Annual average, 1915-19	Annual average, 1920-24	Annual average, 1925-29	Annual average, 1930-34	Annual average, 1935-1939	Annual average, 1940-1944	Particulars

Annual average, 1913-19	Annual average, 1913-19	Particulars												Year 1943	Year 1944	
		Accidents to, or failures of, rolling stock or permanent way						Accidents to trains								
898 in 1919	1,009	941	796	746	4,129	392	(serious damage only)	160	(serious damage only)	113	(serious damage only)	393	(serious damage only)	149	402 (serious damage only)	
11,452 in 1919	11,153	9,141	5,772	K. 91 2.577 3.518 67	K. 74 1.731 3.600 101	K. 92 2.48 1.58 51	K. 1.73 3.733 2.267 1.58 1.46	K. 74 4.394 2.592 1.98 1.46	K. 86 2.576 1.98 1.46	K. 1.43 2.65 4.62 3.85	K. 265 462 34 34	K. 1.49 261 442 94	K. 1.31 263 510 95	K. 1.49 261 442 94	1.248 510 149 149	561 (serious damage only)
2,065 in 1919	1,848	1,661	1,612	1,740	1,740	1,697	1,437.0	308	7,132	338	8,038	486	761	Totals	499	742
not available	17,457	322	320 <sup>1</sup>	288	299	17,230	(1935-1938)	1,6,060	16,060	24,208	294	Passenger journeys originating, including season ticket holders (millions)	499	742	1,323.9	1,334.2
			17,562	(1935-1938)								Railway companies	500	519.5	500	519.5
590,702 in 1913	658,756 (1921-1924)	678,738	602,288	592,365	600,090	Servants employed (March)						L.P.T.B.	301	24,444	301	24,444
334.2 in 1919	368.7	401.3	416.2	411.8	357.1	Passenger and freight train mileage (millions) —						Railway companies	24,358	293	616,756	616,756
123.5 in 1919	121.5	122.7	112.8	115.0	124.8	L.P.T.B.						Shunting mileage (millions)				
not available	28.3	28.9	26.8	29.4	36.7	Light engine mileage (millions)						All casualities per million train miles —				
1.8	1.1	0.9	0.7	0.8	1.3	Killed ...						Killed ...				
16.5	17	18	17	18	2.0	Injured... (serious only)						Injured... (serious only)				

paper restrictions, is also an effective means of propaganda and should be fully resumed at the earliest opportunity." In the case of accidents to staff walking or standing on the line on duty, or when proceeding to or from work, the bulk of them were due to lack of individual care and could be divided under two heads, those at or near stations and those which occurred elsewhere. In the former case they were mainly due to staff failing to make use of footbridges or subways. In one case a woman cleaner neglected to use a footbridge almost immediately over where she crossed the line and was killed. In many ways those occurring to persons proceeding along tracks in connection with their work, or going to or from it, resembled those occurring to men working on the line and the report points out that Rule 234 (a) "should be regarded as equally applicable to all grades of staff when *walking or standing* on the lines. Its inclusion also in the earlier section of the Rule Book, which deals more generally with the safety of railwaymen of all grades, is for consideration when the next revision of the rules is carried out." Total casualties under this heading amounted to 124, as against 116 in 1943; fatalities increased by 3 to 86, including 4 women. When fatalities from this cause, which apply to all grades, are added to those relating to the staff who were struck by trains when working on the permanent way, they represent no less than 56 per cent. of the total fatalities in movement accidents, apart from what are considered train accidents.

Shunting accidents resulted in 47 fatalities, which compares favourably with the figures for 1943 (56) and for the 1940-1944 period (55), and the report records with satisfaction that no men lost their lives while braking or spragging vehicles, as against 2 in 1943. Of the total of casualties, 288, 88 occurred during the hours of darkness and in at least 32 cases, including 12 fatalities, restricted lighting was considered to have contributed. Eight women were killed and 11 seriously injured in movement accidents.

We reproduce, in our usual form, the customary table covering all movement on rail; the liability to casualty to passengers was one killed in some 150 millions carried and one seriously injured in 54 millions. Passenger and freight train mileage worked out at about 29 millions per fatality to a servant and 21 millions per serious injury occurring in train accidents. The rise and fall in the annual averages of deaths in train accidents since the 1914-18 war is given by the following figures:

Sir Alan expresses the view that "although fatalities during 1940-1944 have increased as compared with the inter-war period, it is surprising in the circumstances that the death-roll has been on such a moderate scale," and makes an interesting comparison with the conditions reigning during the previous war. Our table omits all casualties reported as having been caused by enemy action. The report includes, necessarily for the first time, tables giving details of reports of damage and/or delay to railways arising from enemy action. The first reported case was on June 19, 1940, and the last on March 27, 1945; the peak number for six months was 4,186 in July-December, 1940; this was followed by 2,173 cases in the first half of 1941, after which totals were markedly less, the next highest being 950, in the second half of 1944, and we read that "Study of these figures and experience at the time of the damage and dislocation involved, make the safety record of the last five years the more remarkable. Of the 9,239 reported cases (not necessarily confined to single bomb incidents), some 8,000 related to damage; 897 passengers, servants and other persons were killed and 4,379 were injured." Reference to the blackout, all difficulties from which are being got rid of as rapidly as the labour and materials situation will allow, follows, and after saying that the railways contributed "in no small measure to the success of the country's war effort," and mentioning the tasks performed in connection with the Allied landing in Normandy and subsequent operations, Sir Alan concludes his report with the following words of praise for all concerned, with which we cordially associate ourselves:—"These unprecedented demands, on the railways," he says, "were met with depleted staffs and impaired equipment; their record is an eloquent tribute to their efficiency, standard of maintenance and the high factor of safety attained, all of which reflect the greatest credit on every railwayman and woman for the part they played in this historic year."

## LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

### The "Paget" Locomotive

The Chief Mechanical Engineer,  
London & North Eastern Railway  
Doncaster. November 6

To THE EDITOR OF THE RAILWAY GAZETTE  
Sir.—I have read with very great interest the article in *The Railway Gazette* on the subject of Sir Cecil Paget's experimental locomotive. It is of particular interest to me because I was an Improver in the Derby Locomotive Sheds at the time and I remember not only the engine but the secrecy which was observed concerning it. I worked in the shed with a particularly competent fitter who subsequently attained a very high position as a foreman at Derby, and I remember very well on one occasion that he told me he had been out for a run with this engine and that its performance was "absolutely astonishing."

Unfortunately in those days I was not allowed to come into any sort of contact with the locomotive, but I am proud to say that in later life the designer became one of my closest personal friends. I shall always look on him as one of the greatest British railwaymen we ever had.

Yours faithfully,  
E. THOMPSON

### Railway Charges

19, Ingram Way, Greenford,  
Middlesex. October 23

To THE EDITOR OF THE RAILWAY GAZETTE  
Sir.—Although this suggestion may serve only to expose my ignorance, would it not save the railway companies a tremendous amount of clerical work, etc., if established firms paid for carriage of freight by a percentage on their profits and not, as I imagine they do, at the moment, pay for each individual consignment.

Maybe when we get full employment a fixed amount could be deducted by employers from each employee for railway and bus travel, enabling us to travel anywhere in the United Kingdom at any time, but the time for this is hardly ripe.

Yours faithfully,  
A. G. P. SAGE,  
Major, R.E.

[As a firm's profit is influenced by many factors other than the level of transport charges, this proposal is impracticable. Major Sage is evidently unaware of the agreed charge arrangements under which firms pay a flat rate per unit irrespective of the distance conveyed. This flat rate is calculated on the average charge paid during a representative period and is subject to periodical tests. One of these charges—that affecting F. W. Woolworth & Co. Ltd.—is based on a percentage of the firm's annual turnover. Also, during the war, traffic conveyed on behalf of Government Departments has been charged at flat rates per ton, irrespective of its kind and the distance conveyed, to economise clerical labour. We are afraid the time is never likely to be ripe for the adoption of his second proposal!—ED. R.G.]

### G.W.R.—Compliments and Suggestions

Great Western Railway,  
General Manager's Office,  
Paddington Station,  
London, W.2. November 7

To THE EDITOR OF THE RAILWAY GAZETTE  
Sir.—I have pleasure in enclosing copy of a letter which has just been received by the G.W.R. which you may care to reproduce in a future issue of your paper.

Yours faithfully,  
for J. Milne,  
C. S. LOCK,  
Press Officer

[Copy]  
Cleeve Court,  
Streatley-on-Thames,  
Berkshire. October 29

Sir.—I have been a season-ticket holder on the G.W.R. during the war. We have all had to put up with endless restrictions for the past six years. Some are needful, but to us they are as unpleasant as the continual rudeness with which our small requests are so often met.

Thus it is all the more welcome to have a company which still tries to keep a high level of efficiency and courtesy. Before the war, I, and many others, preferred the G.W.R. to any other

railway. Now I want to thank you for having kept your flag flying during these six terrible years. I know that troubles have been infinite. I have been there when Paddington was bombed, and with the menace of the flying bombs. I have stood in crowded corridors countless times, and waited for hours on Paddington when the "Cornish Express" derailed last year. And through all this I think the G.W.R. has set up a record for dogged determination against all difficulties.

I and many of my fellow travellers wish to thank everyone—

The drivers who have taken us to work through thick fog, snow—and bombs.

The guards who have managed packed trains.

The porters, and especially the portresses who have carried heavy loads astonishingly well, and who always answer politely.

The overworked Enquiry Bureaux.

The refreshment room staffs, who do their best with enormous queues.

And especially the girls who announce the trains. Many's the time I have been guided right by their calm, beautifully clear dictation.

Further, may I add a few suggestions for post-war?

Can we please continue to have these girl-announcers with such excellent voices?

Please keep the local stations as charming as they are now (though they can be cleaner). I travel from Goring on the Oxford-Paddington line, and it keeps a beautiful garden which makes such a difference in these drab days of travel.

You will, I know, tighten up the non-smoking rule. The selfishness of some passengers, considering it genuinely makes some of us ill, is deplorable. Naturally, in wartime the rule is harder to keep, but with easier travel it can come back.

And please can we, as soon as you are able, have a few more down trains that stop locally after Reading. Our last is the 8 p.m., which is a little restrictive.

Let me conclude by saying that I think you are justly entitled to be called the safest, most courteous, and finest railway in the whole world.

Yours faithfully,  
(MISS) M. KINGDON-WARD

### Sleeping Car Reservations

London. November 1

To THE EDITOR OF THE RAILWAY GAZETTE  
Sir.—In your issue of October 26 you report under Questions in Parliament the answers given by the Minister of War Transport to questions put to him regarding the reservation of berths in sleeping cars. The answers are a typical civil service shuffle. The railways are said to have 50 per cent. of the berths available for the public but that is not true of the services the public most wishes to use. From Kings Cross to Edinburgh the L.N.E.R. only has four berths out of 34; from Euston to Glasgow the L.M.S.R. has 30 out of 72.

After the end of the year the Ministry of War Transport should cease to interfere. Members of Parliament in particular ought to take their turn with other people.

Yours faithfully,  
VIGILANT

### New Stations

Whitegates, Runcil Lane,  
Kenilworth. November 5

To THE EDITOR OF THE RAILWAY GAZETTE  
Sir.—I am glad to see attention has been drawn in your correspondence columns to the dire need of improvement to New Street Station, Birmingham, and heartily endorse Mr. Hill's plea in your November 2 issue that this matter be given early priority.

The chaotic conditions prevailing there on a Saturday during the summer have to be seen to be believed, and the stupidity of giving one number only to Platform 2, an island platform with two faces, adds to the confusion and leads to such conundrums from the loud-speaker system as "The train standing at the London end of Platform 2, facing Platform 1," etc.

One point Mr. Hill omitted to mention is the inordinate delay caused to incoming trains by the need of collecting tickets at such stations as Stechford, Vauxhall, Monument Lane, Dudley Port, etc. It is surely time that this anachronistic relic of Victorian travel finally was discarded, as the time wasted is the direct cause of a considerable loss of local traffic to competitive road services.

From an operating point of view, the extension of the bays at each end of Platform 1 to form two through platforms would bring much needed relief and could be carried out comparatively easily and at small cost, besides eliminating some of the shunting into the tunnels which blocks the main line for lengthy periods.

As a matter of interest, I wonder, of the many thousands of persons who use the station daily, how many notice the signal

November 16, 1945

## THE RAILWAY GAZETTE

505

box perched precariously over the footbridge between platforms 1 and 2. It is, I believe, used only for shunting purposes on the middle roads and probably dates back from the construction of the station. There used to be a large bell which was rung by the signalman to announce the imminent departure of the trains, but I am unaware if this ritual is still carried out.

Yours faithfully,

L. BUROW

### The Railways in War

London. November 5

**To THE EDITOR OF THE RAILWAY GAZETTE**

SIR,—You will have seen the article, "Steel in War," in last week's *Economist*. In short compass, your contemporary reviews the experience of the steel industry during the war and gives statistics of materials used, supply and consumption of steel and deliveries of finished steel. The tonnages authorised by the various Government departments are stated; the Ministry of War Transport was responsible for about 570,000 a year on an average.

Why cannot we have a similar synopsis of the wartime work of our railways? The City Editor of *The Times* suggested recently that the regular publication of railway traffic receipts should be resumed, but obviously the period of Government control will continue for a year or two and it is therefore more important that operating statistics should be available to show what the railways are doing.

There is no longer any valid reason for withholding the full wartime results and in 1946 periodical returns should be issued on the system observed in 1938. In this age of Government control and prospective extensions of State ownership, the public interest requires that full information should be circulated about developments in the railway position.

Yours faithfully,  
ECONOMICUS

### "Birds in Hand"

London, N. November 12

**To THE EDITOR OF THE RAILWAY GAZETTE**

SIR,—Your "fourth leader" writer is not at all happy in his suggestion that "restaurant cars and improving punctuality" justify a claim "of a return to normal." Nor is it correct that "new types of rolling stock for main-line traffic" are so abundant that they can be pointed to with pride. Is it not doubtful whether the railways will get sufficient new stock built and old stock renovated to carry their summer traffic in 1946? The Southern may be better off than the Northern lines. The coaches on the Bognor Regis trains are most comfortable.

I am, etc.,  
CIVIS

### Publications Received

**Beyer Peacock & Co. Ltd. and Associated Companies: The Second World War.**—This is an admirably produced booklet in stiff covers, which has been produced by Beyer Peacock & Co. Ltd., the well-known locomotive manufacturers, primarily for distribution to its many overseas railway customers. It is profusely illustrated and contains reproductions in colour of six water colour paintings by Andrew Gamley, R.W.S., and Edward Swann of wartime operations on the company's properties. Not the least interesting of the illustrations is a reproduction of a map, taken from an enemy pilot who was over Manchester on January 9, 1941, showing part of that area and with the Gorton works of Beyer Peacock & Co. Ltd. delineated in red. The purpose of the booklet is to explain to overseas railway administrations the reasons why it was not always possible during the war to give them the service they rightly expect in times of peace. After dealing with the immediate repercussions on the company of the outbreak of war, with the need to concentrate its effort entirely in support of the nation's needs, and at the same time comply with the many regulations, restrictions, and directions arising from the war, the many abnormal demands made on the Beyer Peacock organisation are explained. Heavy tanks, notably the "Churchill," gun mountings of several types, gun bodies and mechanisms, shells and bombs, machine tools, and so forth, were all manufactured by the group. Probably the greatest variation from its peace-time practices was involved when it embarked on the production of a number of radio components. It also took part in the construction of the "Mulberry" harbours. The primary normal business of Beyer Peacock & Co. Ltd., the manufacture of locomotives, is also dealt with; some interesting details are given of the heavy wartime demands for motive power on and behind all fronts, and the contribution which the company made towards meeting these needs. Nineteen different designs left the works during the war, covering the 2 ft. 6 in., metre, 3 ft. 6 in., 4 ft. 8½ in., 5 ft. 3 in., and 5 ft. 6 in. gauges. They were produced for India, Persia, France, the Near East,

Kenya, Brazil, Sierra Leone, Nigeria, Gold Coast, French Equatorial Africa, South Africa, the Burma Front, Northern Ireland, and Ceylon. The details given in the chapter on locomotives alone will show overseas railways how great was the load on the company's manufacturing resources in the way of priority locomotives and spares, and explain why commercial requirements could not be met.

**Cape Town Harbour New Graving Dock.**—The South African Railways & Harbour Administration has issued an illustrated brochure describing the construction of the new graving dock in Cape Town Harbour which was built at a cost of £3,600,000 and opened on September 18. The decision to embark on the construction of such a work under war conditions was impelled by the present and future need of maritime accommodation. The drawings for the dock were supplied by the British Admiralty, including the plant and equipment which had to be installed. The dimensions of the new dock, are not exceeded in any port, and it can serve every size and type of ship afloat:—

Entrance length	... 1,212 ft. 5 in.
Entrance breadth	... 143 ft. 0 in.
Depth on sill H.W.O.S.T.	... 45 ft. 9 in.

A large number of British and South African engineering contractors participated in the contract for the construction of the dock. The brochure also contains an interesting history of the progress of Cape Town Harbour with statistics of the trade passing through it. The brochure is well illustrated with pictures of the works in progress and the finished dock, and it contains congratulatory messages from leading South African statesmen and administrators who were concerned in the conception and execution of the project. The dock has been named the Sturrock Dock as a tribute to the Minister of Transport, Mr. F. C. Sturrock, in recognition of his personal interest in the scheme.

**A "Flexible" Commentary on the Subject of Bonding to Rubber.** Rubber Borders Limited, Dunstable, Bedfordshire. 13½ in. by 9½ in. 174 pp. Price 15s.—The "Flexible" Commentary on Bonding to Rubber is a collection of notes written by the staff of Rubber Borders Limited during the war. The commentary is in the form of a flexible brochure to which addi-

tions and amendments can be made from time to time: it is arranged to provide a guide and reference work for engineering designers. The commentary is divided into 75 groups and the pages in each group are numbered separately. Certain groups are classified as sections, designated by tagged title sheets, under such headings as flexible couplings and mountings, bushes, pressure fittings, testing and research, with illustrated notes on design. The whole subject of rubber bonding, with its various applications in engineering, is dealt with fully in the text, illustrated by sectional and other line drawings, photographic reproductions, graphs, and tabulated matter. The theoretical and practical aspects of torsional vibration and similar problems are dealt with in detail.

**Hints to Business Men Visiting Spain and the Canary Islands.** The Department of Overseas Trade. London. 1945. 8½ in. x 5½ in. 28 pp.—This booklet is a further contribution to the "Hints to Business Men" series relative to overseas markets and is obtainable from the Department of Overseas Trade by representatives of United Kingdom firms with an interest in export trade. The publication conforms to the remainder of the series in providing useful information on travel facilities, trading prospects and official regulations, in this instance in Spain and the Canary Islands.

**Mechanised Internal Transport.**—We have received from Douglas (Kingswood) Limited, of Kingswood, Bristol an illustrated brochure, entitled "The Douglas Internal Transport System," which presents the case for the mechanising of internal transport at docks, railway stations, aerodromes, building yards, as well as, more obviously, in factories and workshops. The planning of an internal transport system is dealt with, in conjunction with the use of stillages on which materials or parts can be loaded, as work proceeds, for subsequent collection by a motor-powered truck. The time- and labour-saving advantages of light motor-driven trucks is emphasised, and the various types of Douglas industrial trucks are fully described and illustrated. We are informed by Douglas Limited that copies of this brochure will be supplied on request.

November 16, 1945

## The Scrap Heap

### FORTUNE HIDDEN ON TRAIN

A large sum of money, reported in some quarters to be £1,000,000, was found under the floor boards of the Paris-Berne train at Delle by French frontier officials on November 7 said to have been informed of a contraband operation by someone inside a smuggling ring.

### C.P.R. FACTS

The communications department of the C.P.R. operates 188,540 miles of wire.

The C.P.R. has 86,162 units of motive power and rolling stock.

The wheel foundry at the Angus Shops turns out over 70,000 cast-iron wheels a year.

Every official position in the C.P.R. is held by a man who started his employment in the ranks.

The annual requirement of the C.P.R. for railway ties requires the handling of 10,000 wagon loads, or five train loads a week.

### IRISH MILK

Regarding the 20,000 gal. of milk despatched from Belfast each night by special steamer to Stranraer and thence by special train to Glasgow, a reader, who admits to "an inquisitive, calculative and imaginative turn of mind," had a look at the train while the engine was having a drink at Ayr station. He calculates that the locomotive on its journey to Glasgow consumes 5,250 gal. of water (52,500 lb.) and 11,536 lb. of coal to do itself justice in getting the milk to Glasgow, if not for the morning porridge, then for the midday meal. On the journey 1,154 shovelfuls of coal will be thrown into the firebox to get the steam which enables the driving wheels to make their 25,085 turns.

By a little further calculation he concludes that for the 206,000 lb. of milk conveyed, each lb. of the precious juice entails the consumption of .255 lb. of water and .056 lb. of coal. (The water with which the driver, fireman and guard refresh themselves would not materially

affect the water consumption, he considers). Giving rein to his imagination he then wondered what the cows of the Wigtonshire and Ayrshire herds in fields adjoining the track thought of this great volume of Irish milk passing through some of the richest milk-producing areas in Scotland.

He mentioned the matter to an intimate friend, but the only assistance forthcoming was the unhelpful suggestion that he should "go and ask the cows." In a P.S. he confesses to an omission—the adjective before the word "cows," and I suppose that was out of a delicate consideration for me.—"The Ayrshire Post."

### MILK AND SODA FOR LONDON

A milk train on its way from Carmarthen to Paddington was derailed near Kidwelly recently, and 40,000 gal. of milk for London distribution were lost.

One of the wagons of the train, which comprised 13 milk containers and three siphons,\* left the rails and the rest of the train piled on top. The engine remained on the line. No one was injured. \* Siphon—Telegraph code (G.W.R.) for "milk van."

### 100 YEARS AGO

From THE RAILWAY TIMES, Nov. 15, 1845

### MIDLAND GREAT WESTERN RAILWAY COMPANY OF IRELAND

NOTICE TO CONTRACTORS.—The Directors of this Company are prepared to receive tenders for executing the contract works of the line from Dublin to Innfield, being a distance of about 28½ statute miles, and comprising the usual works of embanking, the building of bridges, the approaches, ballasting, &c., making the permanent way, &c., &c., as more particularly set forth in the drawings and specifications now to be seen at the Office of their Engineer, G. W. Hemans, Esq., No. 52, Lower Sackville-street, Dublin. Tenders to be sent in on printed forms (which will be furnished at the said Office) addressed to the Chairman of the Board, and endorsed "Tender for Works," at the Company's Office, N.J. 23, College-green, on or before the 1st day of December next, 1845.

The above will be divided into two lots (Nos. 1 and 2), the first extending from Dublin to the Maynooth-road, being a distance of about 1½ statute miles, and the second from the Maynooth-road to Innfield, being the remaining 1¾ miles. Parties are at liberty to tender for one or both lots.

The Directors will not consider themselves bound to accept the lowest tender.

By order,  
HENRY BEAUSIRE, Secretary.  
Dublin, 23, College-green, Nov. 6, 1845.



"Between you and me, sir, we don't quite know where THAT line goes to"

[Reproduced by permission of the proprietors of "Punch"]

### RAILWAY QUESTIONS AND ANSWERS

**Statement:** The food and cooking on Continental State-owned railways, and on some U.S. railways, is far superior to food and cooking on British railways.

**Answer:** The British traveller tasting French food for the first time naturally is often attracted by it, but the Frenchman himself, as a rule, is a keen critic of the food supplied to him on the French railways, and the way it is served. As prices charged for meals on Continental and American trains are higher than those on British trains they should be better. If British railways charged equivalent prices they could provide meals of a similar standard. Comparison between meals on railways in Great Britain and other countries is difficult, however, because conditions are entirely different. In America, and often on the Continent, distances are much greater and there is plenty of time in which to prepare and serve meals. Compare this with the situation in these islands where, with the exception of the Scottish expresses, the time available for serving meals for all the passengers varies from an hour to, say, four hours.—From "Answers to Questions and Statements," issued by the British Main-Line Railway Companies, 22, Palace Chambers, London, S.W.1.

### STATION HOME

At Los Angeles—now America's third biggest city—21 families are living in a railway station. They sleep on benches in the waiting halls, wash in the public wash-rooms, and store their clothing in the sixpence-a-day public lockers.

### THE PULSE OF THE UNDERGROUND

"Every time your heart beats, 41 automatic doors on Underground trains open or shut."

So says London Transport and this is how it arrives at this conclusion: During the peak hours, the number of train doors available is 21,820, of which one half—or one side of the train, that is, 10,910, are in effective working at any moment. This figure can be reduced by 20 per cent. for the average of the reduction in service during non-peak hours, which leaves an average of 8,728 doors operating every three-quarters of a mile. The average mileage per car per annum is 52,700, and the cars work 19 hours per day:—

$$\dots \frac{8,728 \times 52,700}{365} \times \frac{4}{3} \times \frac{1}{19} = 88,434$$

door operations per hour.

Assuming the average heart beats of a normal person to be 72 per minute:—

$$72 \times 60 = 4,320 \text{ heart beats per hour.}$$

$$\therefore \text{No. of door operations per heart beat} = \frac{88,434}{4,320} = 20\frac{1}{2}.$$

A door operation is calculated as a complete opening and shutting. Actually, each opening and each shutting involves an operation by the guard, and at each the apparatus has to make separate movements. It can be claimed, therefore, that 41 doors are either opening or shutting each time the heart beats.

### TAILPIECE

(The Jamaica Railway has attained its centenary)

It shines among the Greater Antilles,  
An isle of spice and flowers in tropic seas,  
And lovely still in field and beach and bay

As on the day  
When westward-bound Columbus passed  
that way.

Coffee, bananas, and the sugar cane  
Flourish beneath the tropic sun and rain,  
And to this isle in whose perennial glow  
These wonders show,  
The railway came a hundred years ago.

E. C.

## OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

### SOUTH AFRICA

#### Sick Benefits

The Minister of Transport has announced that all European casual servants of the Railways & Harbours Administration, including re-employed pensioners, but excluding servants employed intermittently, shall be eligible for membership of the sick fund. Casual servants who are members of the sick fund will be entitled to 12 days' sick leave a year, and, when off sick, for a period of not less than two days (excluding a Sunday or a public holiday), will receive two-thirds of their basic daily wage. They will be entitled to medical treatment for their families as well.

In the case of non-European staff, medical attention is at present received only by servants resident on railway property; but from January 1, 1946, provision will be made for the privilege to be extended to staff residing elsewhere, provided their homes are within the district of a Railway Medical Officer. The non-European staff also will be entitled, on completion of twelve months' continuous service, to twelve days' sick leave a year at the rate of two-thirds of their basic daily wage.

### INDIA

#### Indian Standard Time

Indian Standard Time (clocks were advanced one hour in September, 1942) reverted to the old Standard Time from October 15.

In Bengal, Government officials are keeping Bengal Time (6½ hours ahead of Greenwich Mean Time), but railways and Posts & Telegraphs have reverted to the old I.S.T. with the rest of India.

In Assam, there is no alteration in the new I.S.T., which will remain 6½ hours ahead of G.M.T.

#### Karachi-Bombay Railway Link

The construction of the Karachi-Bombay railway link (to which brief reference was made in *The Railway Gazette* of January 12 last) will be the first of the major post-war schemes to be undertaken by the Railway Board. The project involves the building of 300 miles of broad-gauge line. It is estimated that two years will be needed to complete the work. Its remunerative prospects are considered uncertain, but the development of the adjoining country, it is hoped, will make it a paying concern.

#### Railway Employment

All Government railways have been asked to set up selection boards, the task of which will be to comb out unfit temporary hands employed during the war, and confirm, out of the remaining personnel, 30 per cent. of the vacancies unfilled since the outbreak of the war. Seventy per cent. of the vacancies, which are to be offered to candidates with war service, will be filled by these boards during the next two years. All these appointments exclude gazetted posts; but 50,000 men will be absorbed in subordinate and inferior grade railway posts. One thousand men will be absorbed in gazetted posts.

#### N.W.R. Development Plans

In a recent Press interview, Mr. W. T. Biscoe, Chief Operating Superintendent, North Western Railway, said: "The North Western Railway has requested the military authorities that, as the war is now over, the rolling stock which had

been acquired for military requirements should be returned, so that, after intensive overhauling, it could be used for general service." Mr. Biscoe explained that, because of the paucity of building materials in India, and as there was no appreciable change in conditions ruling the import of stock from abroad, various development schemes of the N.W.R. could not be put into operation at present. Rexine was not produced in India, and was not easily procurable from abroad at present. Similarly, there were other products the lack of which was standing in the way of implementation of the railway's plans of development and reconstruction. "We hope, however," said Mr. Biscoe, "to receive from abroad a number of 'XT' 0-4-2 tank engines, and these will be used instead of diesel railcars on short-distance traffic."

#### Radio Telephone on Inspection Car

Radio telephone has been installed in the inspection car used by the General Manager and principal officers of the North Western Railway. During inspections over all parts of the system communication thus can be maintained with headquarters.

### COSTA RICA

#### Important New Tunnel

On August 31, the Northern Railway Company, operating between Port Limon, San Jose, and Al Ajuela, inaugurated a new tunnel at a point where heavy landslides blocked operations for two months during the autumn of 1944. The tunnel is of the cut-and-cover type, of reinforced-concrete construction, and is located on a narrow ledge between the Reventazon River and a nearly-vertical 600-ft. cliff. At present the tunnel is 511 ft. long, but it will be extended about 400 ft. while traffic is being maintained through the completed portion.

### FRANCE

#### Improved Railway Conditions

Rather more than a year ago, railway travel in France was virtually impossible in the greater part of the country because of wrecked bridges, track, and signalling equipment. Now 90 per cent. of the ruined bridges and tunnels have been restored temporarily, 80 per cent. of the destroyed tracks and 60 per cent. of the points are repaired, according to a statement by M. Leo Magne, an official spokesman of the French National Railways (S.N.C.F.).

Tractive power is also improving, as reported in the October 26 issue of *The Railway Gazette* (page 418). The 700 locomotives now under construction in America are being built by the Lima Locomotive Company, the Baldwin Locomotive Company, and the American Locomotive Company, at a cost of \$110,000 each.

#### New Locomotive Types

The S.N.C.F. intends to augment its stock of locomotives by introducing new types. Some of the old types, such as the Pacifics, date back to 1910, although the engines in the hands of French engineers have undergone many improvements. Plans, however, have been made to replace them by standardised types of locomotives, combining some of the latest thermodynamic advances achieved in France with constructional improvements effected abroad. Standardised parts, as far as possible, will be available for all locomotives, which will have greater power for

long-distance runs at higher speeds. Designs will incorporate additional axles for heavier engines and the maximum axle-load will be increased from 20 to 23 tonnes.

#### September Traffic Results

Railway traffic during September reached the highest level since the invasion, according to a statement by Major-General F. S. Ross, Chief of the United States Army Transportation Corps. American military travel accounted for only 8 per cent. of the total for the period. The return of many civilians from their first summer holidays for six years helped to swell the traffic. Approximately 1,994 locomotives and 47,766 freight wagons, General Ross stated, had been brought into France by the United States Army since D-Day.

A new marshalling yard with 33 sidings is in course of construction near Poitiers, on the line from Paris to Bordeaux. The work will extend over three years.

#### Faster Runs on Line from Paris to Lille

Destruction of the Laversine Bridge over the River Oise and of thirteen arches on the Canardiere Viaduct near Creil on the line from Paris to Lille through Chantilly had caused considerable delay in traffic. Trains were forced to make a detour of nearly ten miles on an old line through Epluches. The bridge and viaduct were blown up by the Germans at the time of their retreat, though the viaduct had also suffered under Allied bombings. Work was started on the rebuilding of the viaduct early in March and was continued day and night until completed recently. Traffic was resumed on October 8. Trains gain an hour by the shorter route, doing the journey in 4 hr. 25 min., instead of 5 hr. 24 min., and railcars gain 50 min. with a run of 3 hr. instead of 3 hr. 50 min.

New timetables for the winter services came into force on October 8. The S.N.C.F. announced the running of eight additional fast trains and two railcars. It promises further facilities, as soon as the reconstruction of certain bridges is completed. The new services are:

	Trains	Leave	Arrive
Paris—Lyons	Paris 5 p.m.	Lyons 11.3 p.m.	
	Lyons 7.25 a.m.	Paris 2 p.m.	
	Paris 4.25 p.m.	Bordeaux	11.40 p.m.
Paris—Bordeaux	Bordeaux	Paris 2.50 p.m.	
	7.35 a.m.	Paris 4.25 p.m.	
Paris—Hendaye	Paris 8.40 a.m.	Bordeaux	12.50 p.m.
	Hendaye 10.45 a.m.	Bordeaux	2.5 p.m.
Strasbourg—Lyons	Strasbourg 10.30 a.m.	Paris 10 p.m.	Lyons 10.52 p.m.
	Lyons 7.45 a.m.	Strasbourg 7.40 p.m.	Lyons 3.15 p.m.
Do. Railcars	Strasbourg 6.5 a.m.	Lyons 1.30 p.m.	Strasbourg 11 p.m.

### CZECHOSLOVAKIA

#### Resumption of Traffic with Switzerland

The first post-war through goods train from Czechoslovakia to arrive in Switzerland entered the Swiss frontier station of Buchs on September 24, and in the reverse direction the first goods train left Switzerland on September 29. The route for the direct communication between the two countries is via Plzeň (Pilsen), Domazlice (the Czechoslovak frontier station), Furth i. Wald (the Bavarian frontier station), Regensburg, Munich, Lindau, and Buchs. In accordance with an agreement between the two countries, Czechoslovakia supplies the open wagons for this traffic and Switzerland supplies the covered wagons.

## The Jamaica Railway, 1845-1945

By H. R. FOX, B.Sc., M.Inst.C.E.,  
General Manager, Jamaica Government Railway



William Smith

ONE hundred years ago, on November 21, 1845, the first section of what is now the railway system of Jamaica was opened by the Governor of the Colony, the Earl of Elgin. The following description of the opening ceremony, from *The Falmouth Post* (Jamaica) of December 2, 1845, throws light on the setting in which Great Britain's oldest colonial railway was launched. The style of reporting, in itself, is not without interest. The report (from the *Jamaica Despatch* of November 22) begins:—

"This long and anxiously anticipated event took place yesterday, as had been previously announced. In order to invest the circumstances with the just degree of importance which so auspicious an event in the annals of Jamaica demanded, His Excellency the Governor, the Lieutenant Governor, the several heads of departments, civil and military, the honourable members of the council and Assembly, and a large number of the more wealthy and influential members of the community, were invited to attend. His Excellency the Earl of Elgin arrived at a little after 11 o'clock, attended by his brother, Lt.-Colonel the Honourable Robert Bruce, and accompanied by the Receiver-General. He was received by a Guard of Honour from the 1st West India Regiment, the band of that regiment playing the National Anthem. . . . His Excellency was conducted at about half-past eleven o'clock to the handsome state carriage which has been provided by the company for the accommodation of Her Majesty's Representative . . . and, the company's new engine *Projector* having been attached, the train, consisting of some eight or ten well filled carriages started off on the first railway excursion in the British West Indies, the excellent band of the first W.I. taking its stand in the last, third class, carriage and adding to the hilarity of the scene by a series of lively and well-executed airs. The train passed at a slow pace through the suburban portions of the line, which were densely thronged on both sides with crowds of wondering citizens who loudly



David Smith

cheered the novel exhibition as it passed before them.

"At the Spanish Town, the Governor descended, and proceeded to examine the stations in course of erection, and the other works and designs of the company at that terminus, during which period the engine was adjusted to the other end of the train, and His Excellency and the other passengers having taken their seats, the train started on its return at one o'clock, reaching Kingston Station in about 40 minutes. The speed on the return was during a portion of the distance considerably increased, a maximum speed of thirty miles an hour having been attained. A second trip was shortly afterwards made, when a large

number of other persons who had been favoured with tickets took their seats, and were similarly taken along the line and back, the return train on this occasion performing the distance (nearly 12 miles) in 25 minutes.

"At a little after 2 o'clock, His Excellency the Governor, and his distinguished party, and about 120 of the civil and military authorities, and influential gentlemen of the city, sat down to a superb *déjeuner* provided at the expense of the company, at the Victoria Rooms in Duke Street."

The original stretch of line was 14 miles long, extending from Kingston to Angels, 2½ miles beyond Spanish Town. Now, the tracks of the Jamaica Government Railway have a length of 216 miles. An illustrated description of the system was published in *The Railway Gazette* of January 5 and 12, 1945.

The promoters of the Jamaica Railway Company, which built the line, were William Smith of Manchester, England, and his brother, David Smith, of Kingston, Jamaica, who also managed the railway from 1845 to 1865. The survey, plans, and estimate for the line were prepared by James Anderson, a civil engineer of Edinburgh. The cost of the original undertaking, including buildings and rolling stock, was £222,250.

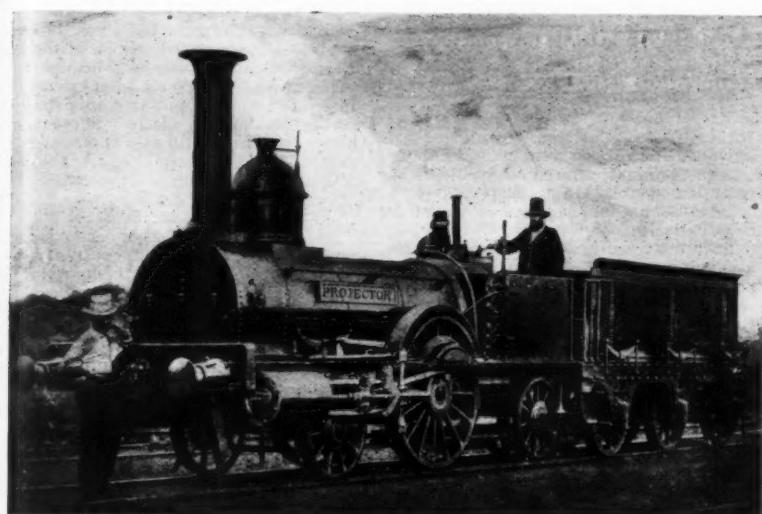
In 1867 the line was extended from Spanish Town to Old Harbour, a distance of 11 miles, at a cost of £60,000, and in 1879 the Government of Jamaica bought the railway for £93,932. Surveys were then made to extend the line from Old Harbour to Porus (2½ miles) and from Angels to Ewarton (14½ miles). These extensions were completed in 1885 at a cost of approximately £280,000.

In 1890 the Government sold the railway to an American syndicate (the West India Improvement Company) for £800,000, with a proviso that the purchaser should extend the line to Montego Bay and Port Antonio at its own expense.

The extension from Porus to Montego Bay (66 miles) was opened in 1894, and the section linking Bog Walk (on the Ewarton Line) with Port Antonio, 55 miles distant, was brought into use in 1896.



One of four locomotives ("Emancipation," "Enterprise," "Perseverance," and "Success") built by Sharp Brothers of Manchester, in 1845, for Jamaica. They had 12 in. x 18 in. cylinders, and 5 ft. driving wheels



*The pioneer Jamaica locomotive "Projector." This, with the sister locomotive "Patriot," was built by Sharp Brothers of Manchester, in 1844. They had 13 in. x 20 in. cylinders, and 5 ft. driving wheels.*

In 1900, after default by the American syndicate, the Government of Jamaica again took over the railway, and appointed Mr. James Richmond, C.M.G., as Manager. A branch line from May Pen to Chapelton (13 miles) was opened in 1913, and in 1925 the line was extended from Chapelton to Frankfield, a distance of 10 miles. The branch from Linstead to New Works was brought into service in 1913.

In the closing years of its first century, the railway system of Jamaica played an important part in Anglo-American defence, and in 1941 a six-mile extension was laid from a point between May Pen and Porus to the United States air base at Fort Simonds, overlooking the United States naval base near Old Harbour on the strategically-important Caribbean Sea.

Sir Noel Livingston, the first President of the Legislative Council of the island (under the new constitution of December, 1944) is a grand-nephew of the first General Manager of the railway.

The illustration on this page shows the *Projector*, which, with a companion loco-

motive, the *Patriot*, was intended originally for the Berlin-Hamburg Railway. They were diverted to Jamaica to expedite the opening of the railway there. These engines were built by Sharp Brothers of Manchester in 1844. The same firm built four locomotives in 1845 for the Jamaica Railway Company, named respectively *Emancipation*, *Enterprise*, *Perseverance*, and *Success*; a reproduction of an early photograph of one of them appears on the opposite page.

Today, the Government Railway system comprises all the lines in Jamaica; it is built to the standard gauge of 4 ft. 8½ in., and the mileage operated is 216, as already stated; this includes the 6-mile branch added in 1942. The line from Kingston, the capital, on the south coast, to Montego Bay, the tourist centre, on the north-west coast (a distance of 113 miles), crosses the main range of mountains at an elevation of 1,700 ft. above sea level. The ruling curvature and gradient of the mountain sections are 300 ft. and 1 in 30, respectively. The track consists of 80-lb. rails laid on native hardwood sleepers (with an average life of

30 years) on hard limestone ballast. Rolling stock and traffic were described briefly in the two articles in *The Railway Gazette* of January last, to which reference is made above.

(See also editorial article, page 500).

**MORE GOVERNMENT FACTORIES ALLOCATED TO INDUSTRY.**—A further 17 Government factories have been allocated for civilian production by the Board of Trade. They represent an area of nearly 2,000,000 sq. ft., and will provide employment for over 7,000 persons. Up to date, 132 Government factories, with an area of about 37,000,000 sq. ft., and estimated to provide work for about 270,000 persons, have been allocated by the Board of Trade for civilian industry or as disposals depots.

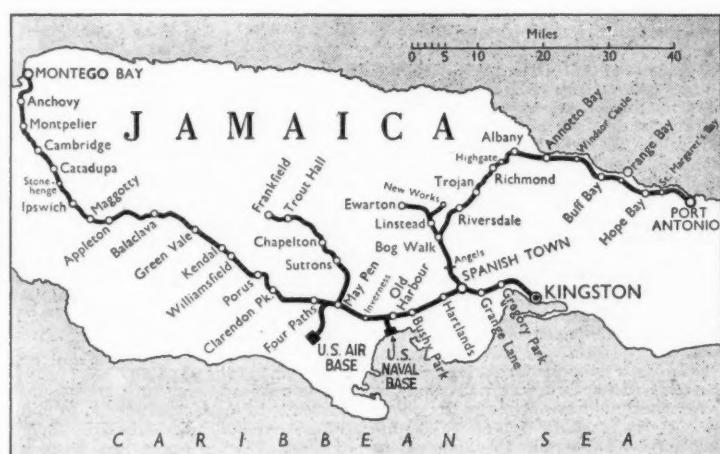
**G.W.R. WARTIME RADIO SYSTEM.**—A network of 16 fixed and mobile wireless stations was operated by the G.W.R. during the war as a stand-by in the event of a breakdown of land-lines. The fixed stations were in London, Reading, Swindon and Cardiff; the rail and road mobile units were available at key points in the West of England, South Wales and the Midlands. The rail units were specially converted passenger coaches, and the road units were designed and constructed at the G.W.R. Swindon Works and mounted on Ford "V8" chassis.

**THE LATE COLONEL N. A. RYAN.**—We understand that the following appreciation of Colonel Norman Ryan, formerly General Manager (Lines West), Chicago, Milwaukee, St. Paul & Pacific Railroad, and afterwards Assistant Chief of Transportation & Chief of the Military Railways Division, U.S.A. Army Transportation Corps (E.T.O.) (to whose death we made reference last week), which appeared in *The Times* of November 8, was written by a chief officer of one of our main-line railways:—

With a few colleagues Ryan laid the foundation of the great military railway and port network built up by the Americans on this side of the Atlantic to supply the North African and European campaigns. So well did he know his business, and so excellent were the relations which he established with his opposite numbers on the British railways and at the Ministry of War Transport, that the organisation grew from small beginnings into a vast supply machine with the minimum of friction and difficulty. Ryan's human and friendly approach opened all doors, as did his positive liking for Britain and the British, though it would be hard to imagine a more "American" American.

Ryan was General Manager, Western Lines, of the Chicago, Milwaukee, St. Paul & Pacific Railroad at the time of Pearl Harbour, and early in 1942 he was specially selected to go to London under General Lee, United States Army Chief of Supply Services, and Major-General (then Colonel) Frank Ross, Chief of the United States Army Transportation, E.T.O.U.S.A. Throughout 1942, 1943, and the first half of 1944 he laboured day and night, weekdays and Sundays, at his task, travelling all over the country in the special Pullman which the British railways had put at his disposal. The great United States military rolling stock assembly depot at Hainault, near London, was his creation.

In the autumn of 1944 he went to France and helped to organise French railway and water transport. He returned to America in the spring of this year, and was, until recently, Military Port Commander, New York. For his services in Europe he was awarded the United States Legion of Merit. His exceptional knowledge of railway technique, his bluff personality, and his capacity for friendship will long remain a treasured memory for all of us here who knew him and worked with him in the great adventure.



Sketch map of the Jamaica Government Railway

November 16, 1945

## Modern Methods of Handling Goods at Railway Stations\*

*Address to the Institute of Transport by Mr. T. W. Royle,  
Vice-President, L.M.S.R.*

BY the end of the 19th century it had become established railway practice in dealing with the sorting of small consignments in goods sheds to provide platforms, over which the goods were sorted and conveyed between rail and road vehicles by means of two-wheeled hand barrows. After the grouping of the railways the L.M.S.R. made a survey of its goods sheds which revealed great variations in design and operation, as developed by the constituent companies. A striking feature which showed itself was that the larger the goods shed the more expensive was the handling of goods. After the survey, the L.M.S.R. decided, in 1935, to appoint a special staff of expert goods operators to ascertain the best methods and type of lay-out for handling miscellaneous traffic. The basis of the research was time-study analysis which, broadly, meant breaking operations down to their component parts and studying how each could best be performed.

The major features which this inquiry established were :—

1. That there was scope for elimination of waste time and effort, improved organisation and introduction of mechanical aids.

2. That sorting had a detrimental effect upon the balance of the gang work and the weight of the barrow-load, which became more pronounced as the size of the shed increased.

3. That a disproportionate effort was incurred by a man in moving himself and his barrow with only about  $1\frac{1}{2}$  cwt. and that there was totally unproductive effort entailed in empty barrow running, both of which could be materially reduced by moving the traffic in bulk from point to point.

4. That waste time and unproductive effort was caused by lack of balance between the different sections of work.

5. That the need for carrying a staff sufficient to meet the heavy evening "peak" of forwarded traffic, resulted in uneconomic working, and that this could be reduced or eliminated, if arrangements were made to use the services of the town carter to assist the shed staff in the discharge of the town collection vehicle direct to wagon.

6. A corollary to this direct loading method was that the check on the loading of goods into the wagons was made more effective.

7. That there should be the maximum freedom of movement about the shed by the absence of physical obstruction.

As a consequence of the extensive research, the L.M.S.R. recently constructed two new goods sheds, one at Birmingham, in Lawley Street, and the other at Derby, St. Mary's, each representing a fundamental departure from orthodox methods. The nature of the traffic dealt with at the two stations differs, inasmuch as at Birmingham the preponderance is town traffic, whereas at Derby the bulk of the traffic is for transhipment, and these differing circumstances necessitated different methods of treatment.

### Birmingham—Lawley Street

At Lawley Street the shed is divided into two sections, the southern dealing with forwarded traffic, and the northern with received traffic; taking the received section first, the main features of this section were the two conveyors, by means of which traffic

unloaded from the wagons was distributed (a) to internal station drays—for the reception of tranship traffic; and (b) to "flats"—for the reception of traffic for town delivery.

Each conveyor ran at 40 ft. per minute, and was served by two wagon roads, each holding ten vehicles. The loaded vehicles were positioned by electric capstan and traffic unloaded and the packages placed on the conveyor, label uppermost, opposite the door of the wagon. As each raft of wagons was discharged the empty vehicles were withdrawn by capstan and a fresh supply of loaded wagons worked into the shed by the same means.

At the end of each of the two conveyors the traffic was sorted—on one side of the conveyor into four main divisions for tranship traffic, and on the other side, into four main divisions for delivery in the Birmingham area. The tranship traffic was transferred from the conveyor to internal station drays (eight to each conveyor) which were specially designed pneumatic-tyred vehicles, and which were hauled by an electric tractor to the reservoir at the end of the forwarded wagon roads. Traffic for town delivery was transferred from each conveyor to what are termed "flats," carrying an average of 25 cwt. There are four pairs of flats to each conveyor, each pair serving one of the four sections of the town delivery units. Each of these sections had twelve delivery units, the total number of delivery rounds being 48. It is necessary that the flats should be capable of being transported to any one of the four dray loading sections. This is accomplished by flat traversers.

The flat traversers are able to project a "U" shaped arm underneath a flat, elevate it, retract the flat on to its own carriage, travel with it and deposit it either at one of the two dray loading sections in line with the particular conveyor the traverser serves; or, alternatively, the flat can be projected the opposite way and deposited on a series of central piers from which point the second traverser can pick up the "flat." By this means a "flat" loaded at one conveyor, but required at a dray loading section in line with the other conveyor, is transferred to the appropriate dray loading runway.

The wagon traverser of 20 tons capacity which runs outside the shed right across the received and forwarded sections approach lines was self-propelled, and was also fitted with a capstan by which it could pull a wagon out of the shed on to the traverser, carry it in either direction, and deposit the wagon on any line required. The traverser had various uses; it could take a wagon which had been unloaded in the received section and put it on one of the forwarding lines to be placed in position for loading outward traffic, and it might be used to assist in marshalling loaded wagons in train order.

In the forwarded section there were eight wagon roads inside the shed on which 203 rail vehicles could be set, and except for a small sorting deck at the end of the shed for dealing with a comparatively small number of very miscellaneous or awkward loads, no decks were provided. Alongside the wagon roads were paved cart roads, and the carter or motorman who collects the goods from the Birmingham traders took his vehicle directly alongside the appropriate rail vehicles for the loading of the traffic.

Tranship traffic was sorted at the end of the two conveyors to internal station drays,

each of which represented a pair of wagon roads in the forwarded section of the shed. As soon as the vehicle was loaded it was taken away by a tractor to the end of the forwarded section, and an empty dray was set by hand in its place. Subsequently, horses with light tubular shafts were attached to the drays by an automatic coupling arrangement and the vehicles were drawn alongside the rail wagons and the traffic loaded direct for dispatch.

Specially designed battery-operated road mobile cranes of 25 cwt. capacity were employed for the loading of heavy items, and the jibs of these appliances could be lowered to the horizontal so that they could pass inside rail vans with a load on the hook.

The whole shed formed a rectangle of about 650 ft. long by 350 ft. wide and covered approximately  $5\frac{1}{2}$  acres.

### Derby—St. Mary's

This shed covered an area of just over 4 acres, being about 430 ft. long by 410 ft. wide. The roof was in three spans only. The shed was designed to deal with about 650 tons of tranship traffic daily, together with 275 tons of miscellaneous traffic. At Derby the inwards rail wagons were dealt with on the two outer sides of the shed, whilst the ten sidings used for outwards traffic were placed in the middle; the operations on both sides of the shed were identical.

The unloading of the rail wagons was performed with the assistance of wagon unloading machines.

Dealing first with wagon unloading machine No. 2, the loaded wagons after being set in the shed, were moved forward, singly, by capstan to No. 2 wagon traverser. They were then traversed to the road alongside No. 2 unloading machine and moved forward past the unsheeting deck to the unloading machine, this latter movement being effected by a mechanical wagon mule with an arm which engaged the wagon buffer and enabled the wagons to be positioned accurately opposite the unloading machine. This wagon mule was under the control of the wagon unloading. After unloading, the wagon was then passed forward on to the empty road by means of a closed-loop capstan, which was a power-driven endless wire rope controlled by press buttons.

The unloading machine was set at right angles to the wagon road. The machine consisted of a power-driven belt from which packages ran on to a series of gravity rollers. The machine was capable of entering the doorway of each rail vehicle. As the packages passed along the machine, they were identified and sorted to one or other of specially designed pneumatic-tyred internal station drays, eight of which were ranked round each machine.

The drays when loaded were hauled by tractors to the end of the shed where the drays containing traffic for delivery in the town were ranked behind a narrow deck, and the drays containing transhipments were ranked behind the buffer stops of the forwarded wagon roads.

The three main divisions of town traffic were sub-divided in each case to nine or ten individual delivery round vehicles, whilst the dray loads of transhipments were hauled by horses, with patent light tubular shafts which automatically coupled to the drays, alongside the wagons where the traffic loaded for dispatch.

The outwards wagons were set in marshalled order as far as possible to minimise subsequent shunting, and across the mouth of the shed two self-propelled 20-ton wagon traversers, each carrying its own capstan, were provided to assist in the setting and re-setting of the forwarded wagons.

\* Extracts from a paper read before the Institute of Transport, London, on November 12

## A Modern American Marshalling Yard

### Rearrangement of 3-miles long yards at Roanoke, Norfolk & Western Railway, and installation of latest equipment for gravity marshalling work

ROANOKE, Virginia, stands at the centre of the system of the Norfolk & Western Railway, which extends from Cincinnati and Columbus, Ohio, in the west, to the seaport of Norfolk, Virginia, in the east. The Norfolk & Western is one of the largest coal-carriers in the United States, and about 40 per cent. of the loaded traffic handled at Roanoke consists of coal mined in the Virginia and West Virginia coal-fields, which has to be moved eastwards. Much of this is brought in from the railway's Shenandoah division, which comprises two secondary lines joining the main line at Roanoke, one from Hagerstown, Maryland, in the north-east, and the other from Winston-Salem, North Carolina, in the south. Until 1940, the marshalling at Roanoke was carried out in the flat Park Street yard, used chiefly for the classification of westbound traffic with the exception of empty coal-wagons, which were dealt with in a yard devoted exclusively to these empties; there were also two eastbound yards, one for receiving, and the other, a gravity yard, for classification. There was also an extensive locomotive depot, with a 40-stall engine-shed and a wagon-repair yard.

When reconstruction and extension were decided on in 1940, Park Street yard was considered as adequate, but the work put in hand in November of that year affected all of the other three yards and the locomotive depot. In the eastbound receiving yards, the number of tracks was increased from 17 to 20, and they were lengthened at the west end to accommodate trains of 110 to 130 45-ft. bogie wagons, including locomotive, compared with the previous 65 wagons; the total capacity of this yard is now 2,430 bogie wagons. Parallel to it, on the north side, is the westbound empty wagon yard, the 10 tracks of which have been lengthened to take trains of 155 to 160 wagons, with a total capacity of 1,565 wagons; previously, the maximum length of trains of empties, until they were divided for bringing into the yard, was 75 to 80 wagons. By this increase of siding length, much splitting of trains and consequent delay is now avoided.

The principal development, however, has been that of the eastbound gravity marshalling yard. The old yard, containing 19 tracks, has been enlarged to 46 tracks, with capacities ranging from 22 to 40 wagons each. It is approached, over the hump, by double tracks from the eastbound receiving yard; one of the hump tracks serves 22, and the other 24, classification tracks. Double crossovers, laid in at a point just before the two hump tracks separate make it possible to switch wagons at will from one hump track to the other. Immediately below this point, on the run-off, independent single run-around or interchange tracks from either side of the receiving yard join the hump tracks before the latter fan out into the classification tracks.

From the eastbound receiving yard, the hump tracks rise at 1 in 200 until they reach the hump, up the westerly side of which they rise for 445 ft. alt 1 in 42 to the apex. From this they fall for 114 ft. on a separation grade of 1 in 38; the section concerned is equipped with single electro-pneumatic wagon retarders, 34 ft. 6 in. long, one in each track, with 5 cylinders applied to each rail. The grade then eases for 174 ft. to 1 in 133, and along this length there is a weighbridge installed in each track, with a

bypass track if no weights are required. Below the weighbridge length, there is a second separation grade, which for 130 ft. is inclined at 1 in 26½; on this grade double wagon retarders are installed in both tracks, each 72 ft. long and with 11 cylinders to each rail. The hump tracks then flatten out to 1 in 71½, and here the third pair of retarders is installed; each is a triple retarder, 103½ ft. long, with 16 cylinders to each rail. The 1 in 71½ grade continues through the three sets of switches for dividing each hump track into four secondary leads, each of which is graded at about 1 in 100, and has its own double retarder, 72 ft. long. Immediately beyond these last retarders, the four secondary leads fan out into the individual classification sidings, and the grades gradually ease to level. The wagons thus pass through four successive stages of retardation, all of which can be applied, and hand-operated skates are used when necessary to stop them at the easterly end of the yard.

From the north to the south side of this yard there are, in succession, 2 tracks for defective wagons, 5 in which wagons for local delivery points are marshalled, 4 long marshalling sidings, 30 medium length sidings, 4 more long sidings, and a track to receive wagons for the local freight depot. At the eastern end of the yard, the two groups of 4 long sidings converge to form an 8-track forwarding yard in which the capacities of individual tracks range from 125 to 142 wagons, including locomotive; the total capacity of this yard is 1,050 wagons. By means of a series of ladders, the 30 shorter classification tracks, which lie between the groups of long tracks, converge into two tracks which extend into the forwarding yard.

All the switches at the hump end, together with the retarders, are operated by electro-pneumatic power from three control towers, one of which is situated part-way down the hump incline, and the other two immediately opposite the retarders in the two groups of secondary leads, one for each group.

The communication and control arrangements are very modern. For moving trains over the hump, three locomotives are used, two on each daily roster and one in reserve: each locomotive is fitted for two-way communication between the crew and the hump foreman. On the locomotive there are installed an equipment box containing the transmitter and receiver, a dynamotor to provide the correct voltage for the valve circuits, a receiving coil and an output transformer, and, in the cab, a control panel, loudspeaker, and hand microphone; in the foreman's control cabin there is similar equipment, including a foot-control switch. High-frequency carrier current is used as the medium of transmission. The circuit includes a line wire stretching from the control cabin to the far end of the receiving yard, carried on poles down the middle of the yard. At the far end, the line is earthed to each of the tracks carrying the circuit, and between this point and the top of the hump, one rail of each track is bonded. At the hump end of the circuit connections are made with the tracks through the secondary of an output transformer.

When the foreman speaks into his microphone, voice currents are produced which are amplified and mixed with the carrier current. After being filtered and separated,

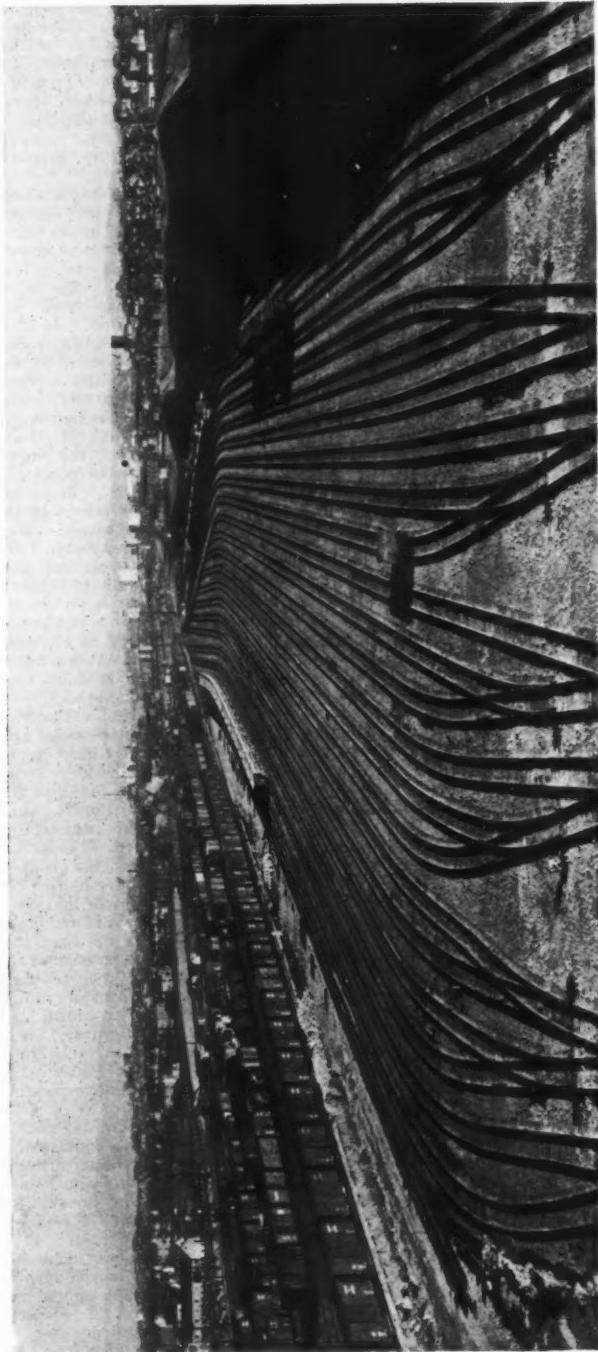
the carrier current is amplified and transmitted, by means of the output transformer, into the track rails. This current, picked up by the receiver coil on the locomotive is amplified and demodulated to separate the voice frequency currents from the carrier current. The voice currents are then amplified further and passed to the loudspeaker in the cab. In addition to vocal control, five-indication three-light colour-light signals are installed at the top of the hump for each hump track. A red indication signifies "stop"; yellow "hump slowly"; green over yellow "hump at medium speed"; green "hump fast"; and flashing yellow "back up." These indications are duplicated by repeater signals in the receiving yard.

There are complete communications throughout the yard. For transmitting the switching lists from the hump yardmaster's office to the three control towers and the general yardmaster's office, teletype machines are provided; the hump foreman uses carbon copies from the yardmaster's teletype machine. A loudspeaker system connects all operating points in the yard with a master control in the hump yardmaster's office. The yardmaster is thus able to speak to the control towers and hump foreman, to the switchman at the west end of the receiving yard, and to the general yard office; the hump foreman can speak to the same points, as well as with the yardmaster. There are also loudspeakers at various points in the yard, and adjacent microphones, which enable wagon inspectors, brakemen, and others immediately to reply to any call from the yardmaster, hump foreman, or others.

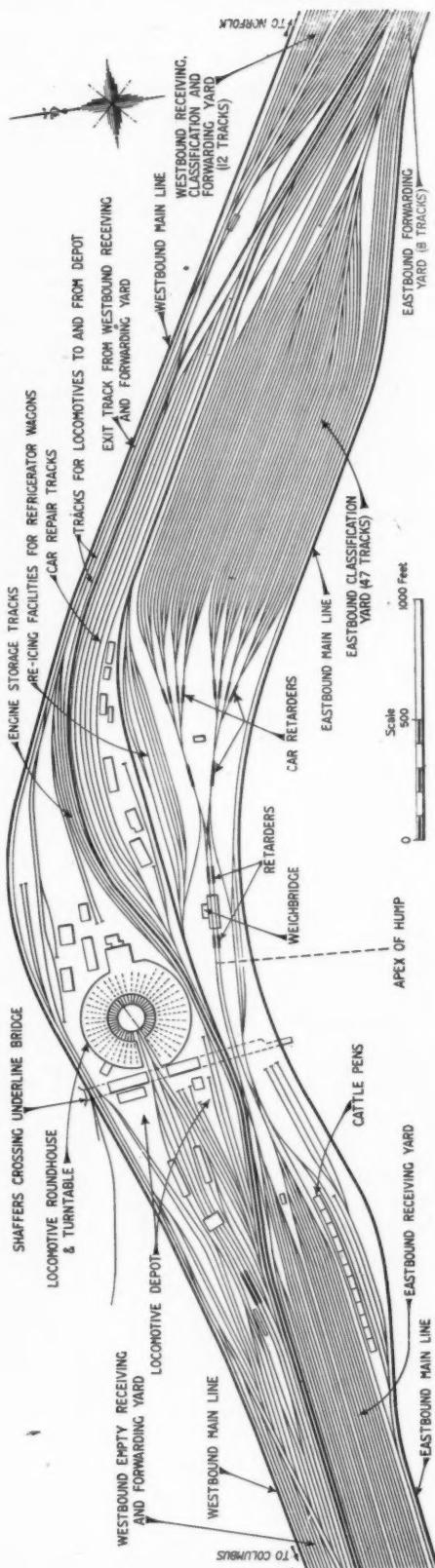
Extensive excavation work was necessary in laying out the additions to the yards, and especially in the vicinity of the eastbound marshalling yard, where it was necessary to cut back a hill 65 ft. high to a maximum of 400 ft. This alone accounted for 1,221.00 cu. yd. of excavation, of which 625,000 cu. yd. was in rock, and formed a part of the total of 1,623,000 cu. yd. of material excavated. A loop in the Roanoke river also had to be diverted by cutting a new channel 150 ft. back from the tip of the loop; this necessitated the removal of 47,000 cu. yd. of soil.

As to the course of the work, the group of tracks comprising the southerly half of the eastbound marshalling yard was laid first, and during this time the old yard remained in service. When this group and the hump layout had been completed, operation of the old yard was discontinued, and it was then possible to carry out the changes in grading and alignment necessary to form the northern part of the new yard. These changes included raising the tracks to a maximum of 4 ft. 6 in. at the eastern end, and lowering them by a corresponding amount at the western end.

One reason for the lengthy trains handled in the Roanoke yards is that a considerable proportion of the Norfolk & Western freight locomotive stock is of very large and powerful articulated units. The locomotive roundhouse has 40 stalls, and 16 of these have been extended by 35 ft. each; additions to the locomotive depot include a blacksmith's shop; two locomotive-inspection buildings with pits; a washing and locker building for employees of the locomotive depot and shops, and another for main-line engine-crews; an engine-washing platform for two tracks, 46 ft. wide and 136 ft. long; two wagon inspection buildings; and various other auxiliary buildings. The work was completed in December 1941. We are indebted to our American contemporary, the *Railway Age*, for the information on which this description has been based.

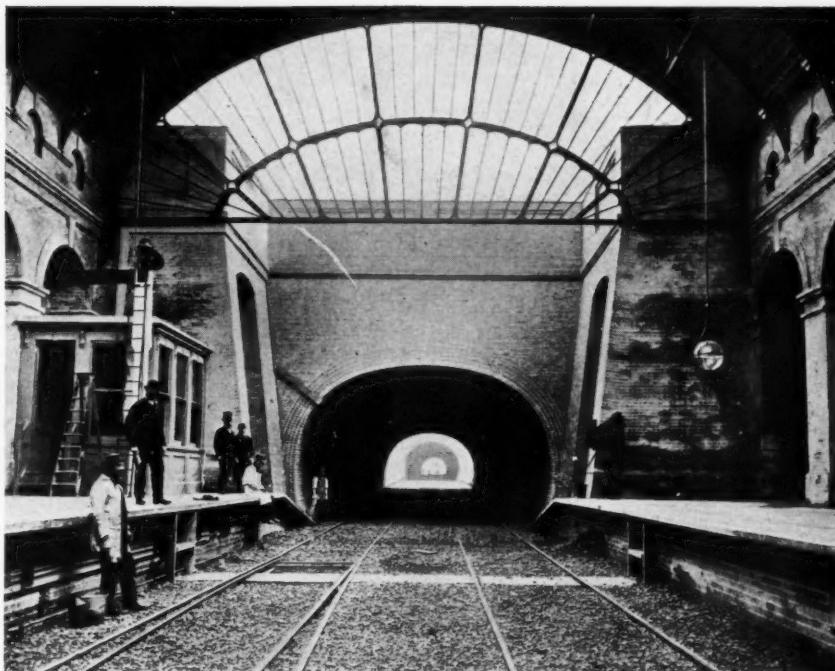


*Southern half of new classification yard at Roanoke, U.S.A., approaching completion*



*Plan of Roanoke Marshalling Yard, Norfolk & Western Railway, U.S.A.*

### Building the Inner Circle Railway—1



*Praed Street Station, Metropolitan Railway, looking towards Edgware Road. View taken during the construction of the line. The same scene, after air raid damage on October 13, 1940, forms the subject of an illustration on page 514*



*A construction view of Praed Street Station taken about 1866, looking towards Bayswater. This section of line was authorised by Act of 1864, and was opened from Praed Street to Gloucester Road (2 miles 21 chains) on October 3, 1868*

**Bomb Damage to Paddington (Praed Street) Station, Metropolitan Line**

On October 13, 1940, Praed Street Station, Metropolitan Line, was hit by three bombs. The platforms and track were damaged, six passengers were killed, and several members of the staff injured. This view was taken on October 15, while restoration work was in progress. It is facing towards Edgware Road. Train services were restored on October 16. When this section of line was opened, on October 3, 1868, Praed Street Station secured special press mention for its architectural attractiveness and traffic convenience.

## RAILWAY NEWS SECTION

### PERSONAL

Mr. F. R. E. Davis, C.B.E., Secretary, Great Western Railway Company, has been elected Mayor of the Royal Borough of Kensington.

Major the Hon. Sir Edward C. G. Cadogan has been appointed Vice-Lieutenant of the County of London. He is Deputy-Chairman of the Great Western Railway Company.

Lt.-Colonel C. O. Haigh Bury has been elected a Director of the San Paulo (Brazilian) Railway Co. Ltd., in place of Lord Balfour of Burleigh, who has resigned.

Mr. H. R. Fox, B.Sc., M.Inst.C.E., General Manager of the Jamaica Govern-

The Rt. Hon. Lord Burghley and Mr. Albert Henry Stanley Hinchliffe have been appointed representatives of the L.N.E.R. on the Cheshire Lines Committee, in place of the late Sir Gerald F. Talbot and of the Rt. Hon. Lord Balfour of Burleigh. Mr. Hinchliffe is President of the Manchester Chamber of Commerce.

Mr. E. J. Batchelor, Director of Sales of the Darwin group, and Mr. H. C. Yaffe, General Manager of Production, Darwins Limited, have been appointed to the board of Andrews Toledo Limited.

Mr. F. D. Arney, M.Inst.T., Deputy General Manager, Port of Bristol Authority, who, as recorded in our November 2 issue, has been appointed General Manager, entered the Port

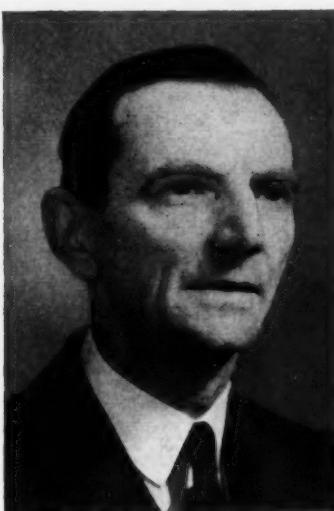
the Great Northern Railway. In 1919 he became London Cartage Manager for the Great Northern, Great Central and Great Eastern Railways, and in 1923 he was made Cartage Manager (Southern Area), L.N.E.R.

Mr. Hubert H. Scott, Chief Clerk to the Vice-President of Traffic, Canadian Pacific Railway, who, as recorded in our November 9 issue, has been appointed Assistant to the Vice-President of Traffic, was born at Merriton, Ontario. He lived in Cornwall until he went to Montreal in 1912 to join the Canadian Pacific Railway as a stenographer in the General Passenger Department. Among positions he has held was that of Secretary to Sir George Bury when he was Vice-President of the C.P.R. Mr. Scott was transferred to the



**Mr. H. R. Fox**

General Manager, Jamaica Government Railway, an article by whom appears in this issue



**Mr. F. D. Arney**

Appointed General Manager,  
Port of Bristol Authority



**Mr. H. H. Scott**

Appointed Assistant to the Vice-President  
of Traffic, C.P.R.

ment Railway, who is the author of an article entitled "The Jamaica Railway, 1845-1945," which appears elsewhere in this issue, was born in Jamaica in November, 1889. After his schooldays at Epsom College, England, he graduated as B.Sc., Mining & Civil Engineering, from the Massachusetts Institute of Technology in 1912. Mr. Fox worked on railways in Canada and in the West Indies from 1912 to early 1915, and served with the Royal Engineers in France from 1915 to 1918, retiring with the rank of Captain. From 1919 to 1921 he served as District Engineer, P.W.D., British Guiana, and as Engineer in the bauxite mines on the Demarara River. From 1921 to 1926 he worked on the Jamaica Government Railway as Construction Engineer, and he was appointed Chief Engineer in 1926. As from January 12, 1939, Mr. Fox was appointed also the first General Manager of the Jamaica Government Railway (formerly the principal executive officer had been known as Director). He remained General Manager & Chief Engineer until last year, when he relinquished the latter post, and retained that of General Manager. Mr. Fox also contributed to *The Railway Gazette* an article on "The Railway System of Jamaica," which appeared, in two parts, in our issues of January 5 and January 12.

Authority's service in 1914. He served overseas with H.M. Forces in the 1914-18 war. Mr. Arney was appointed Office Manager, Head Office, in 1933, and has since held positions of Assistant Secretary, Assistant General Manager and Deputy General Manager, before being appointed General Manager from October 1 last. He is a member of the Bristol & Severn Ports Board of the National Dock Labour Corporation; Chairman of the Bristol Port Emergency Committee; and a Vice-Chairman of the Institute of Transport West of England Section.

Mr. G. M. Wells, who recently resigned his position with the Ministry of Supply as Chief Engineer of the Royal Ordnance Factory, Risley, has accepted an appointment with Livesey & Henderson, Consulting Engineers, as Head of that firm's Locomotive, Carriage & Wagon, and Permanent Way Departments, as from November 19.

We regret to record the death on November 5, at the age of 76, of Mr. Robert Horace Todd, who retired in 1930 from the position of Cartage Manager (Southern Area), L.N.E.R. He commenced his railway career in 1885 with

office of the Vice-President of Traffic 26 years ago, and for the last 24 years he has been Chief Clerk to the Vice-President of Traffic. Among special tasks carried out by him during the recent war has been the gathering of information on C.P.R. employees interned by the Japanese; through his efforts the process of repatriation was made easier for them.

We regret to record the death in Belfast of Mr. John Govan, who was Steamship & District Superintendent, Belfast, L.M.S.R., from 1925 until his retirement in 1932.

We regret to record the death on November 6, at the age of 68, of Sir Glynn Hamilton West, M.Inst.C.E., formerly Chairman of Sir W. G. Armstrong, Whitworth & Co. Ltd., from which position he retired in 1926.

The council of the European Central Inland Transport Organisation, which recently concluded its first session in London, elected as its Chairman Mr. Erik Colban (Norway) and as Vice-Chairman Mr. P. Baracek Jacquier (Czechoslovakia). It appointed an executive board of seven members: Mr. Jean Lévy (France); Mr. C. A. Birchell (United Kingdom); Colonel J. H. Gildea (U.S.A.); Major-General M. V. Obyden (U.S.S.R.); Mr. Paul de

November 16, 1945

Groote (Belgium); Mr. J. Zielinski (Poland); and Dr. B. Sorma (Czechoslovakia).

Mr. E. Barnard has been appointed Deputy-Secretary, Department of Scientific & Industrial Research.

Mr. L. W. Cox, District Controller, Liverpool (Lime Street), L.M.S.R., who, as recorded in our November 2 issue, has been appointed District Operating Manager, Liverpool (Lime Street), completed his education at Dean Close, Cheltenham, and joined the Midland Railway in 1919 as a junior clerk. After experience in passenger and goods station working, and as a relief clerk, he passed through the various sections of the Derby

has been re-elected Deputy-Chairman. Lord Burghley is a Director of the London & North Eastern Railway Company.

Sir John Anderson, M.P., has been re-elected a Director of the Employers' Liability Assurance Corporation Limited. He is a Director of the Southern Railway Company.

Mr. J. R. Darbyshire, Outdoor Assistant to Divisional Superintendent of Operation, Crewe, L.M.S.R., who, as recorded in our November 2 issue, has been appointed District Operating Manager, Barrow-in-Furness, started his railway career in the Goods Department of the old L.N.W.R. at Northwich in 1904, and was transferred to Hartford as

Chemical Industries Limited) would be visiting South Africa soon.

Mr. K. R. M. Cameron, B.Sc., M.I.Loco.E., who, as recorded in our October 5 issue, has been appointed District Locomotive Superintendent, Perth, L.M.S.R., was educated at Hillhead High School and the Royal Technical College, Glasgow. He graduated B.Sc. at Glasgow University with first class honours. Mr. Cameron commenced an apprenticeship with Mavor & Coulson Limited, and then served with the L.M.S.R. at St. Rollox; for three years thereafter he was engaged in the drawing office and on outdoor machinery work. He was appointed Assistant Foreman, Locomotive Erecting Shop, Crewe, in 1931, and in 1934 became Technical Assistant in charge of Central



**Mr. L. W. Cox**

Appointed District Operating Manager, Liverpool (Lime Street), L.M.S.R.



**Mr. J. R. Darbyshire**

Appointed District Operating Manager, Barrow-in-Furness, L.M.S.R.



**Mr. K. R. M. Cameron**

Appointed District Locomotive Superintendent, Perth, L.M.S.R.

Staff Office. When the Shunting Analysis Commission was commenced he took up a class 5 position on the commission centred at Derby. From there he went to District Signalman's Inspector at Westhouses, afterwards taking up a class 3 position on the Shunting Analysis Commission centred at Manchester (Victoria). In 1933 he was appointed Class 2 District Signalman's Inspector at Wakefield, and in 1935 Assistant District Controller, Leicester. Later in that year he took up a similar position at Lancaster, Western Division, and in 1938 became Assistant District Controller, Birmingham, Western Division. Later in 1938 Mr. Cox went to the Divisional Superintendent's Office, Crewe, as Head Office Inspector, New Works & Signalling. At the commencement of war in 1939, he had a short time dealing with military traffic in the Divisional Superintendent's Emergency Section; later he was Assistant Divisional Passenger Controller in the same office. In February, 1943, Mr. Cox was transferred temporarily as District Controller, Liverpool (Lime Street); he was appointed permanently to that position in July, 1944.

On relinquishing the Governorship of Bermuda, Lord Burghley has rejoined the City Board of the London & Lancashire Insurance Co. Ltd., and has been re-elected Chairman. Mr. E. A. Watson, who has been Chairman during Lord Burghley's absence,

an apprentice in 1906. From 1907 to 1924 he was a relief clerk in the Liverpool and Crewe Districts, and he was appointed Head Office Inspector (Freight Services), Divisional Control Office, Crewe, in December, 1924. He was transferred to the Operating Assistant's Office of the Chief Operating Manager at Euston in September, 1932. On July 2, 1934, Mr. Darbyshire was appointed Outdoor Assistant to the Divisional Superintendent of Operation at Crewe; he was detached for duty with the Chief Commercial Manager's Routing Committee at Euston from September, 1936, to May, 1938, when he resumed his duties as Outdoor Assistant to the Divisional Superintendent of Operation at Crewe.

The term of appointment of Sir Frank Baddeley as one of the representatives of the Nyasaland Government on the board of Nyasaland Railways Limited ended on October 3, and in his place the Nyasaland Government has appointed Mr. C. E. Rooke.

It was announced recently in Pretoria by Mr. J. H. Hofmeyr, Deputy Prime Minister & Minister of Finance, Union of South Africa, that Lord Nuffield (Chairman of Morris Motors Limited), Lord Leathers (formerly Minister of War Transport, and Chairman of Wm. Cory & Son Ltd.), and Lord McGowan (Chairman of Imperial

Order Office, Derby). He returned to the Northern Division in 1935 as Maintenance Assistant to Superintendent of Motive Power, and in 1939 took charge of the Motive Power Depot at Carstairs. Mr. Cameron was mobilised as an officer in the R.E. (S.R.) in August, 1939, and appointed Electrical & Mechanical Officer for the Shobburyness Experimental Establishment. He proceeded overseas in 1941. In 1942 he was promoted Major and given command of the Military Railway Workshops at Jaffa, Palestine. He was promoted Lt.-Colonel in 1944, and placed in command of No. 2 Railway Workshop Group, R.E., covering military railway shops in Egypt and Palestine, and in May, 1945, became Assistant Director of Transportation (Mechanical), Railways & Docks. He was demobilised in August, 1945, and returned to L.M.S.R. service, as District Locomotive Superintendent, Perth.

The council of the Institute of Welding has awarded the Sir William J. Larke Medal for 1945, together with a first prize of £50, to Mr. W. K. B. Marshall, B.Eng., A.M.Inst.W., for a paper entitled "The Fabrication of Aircraft Fuel Tanks in Aluminium Alloy containing 3 per cent. Magnesium." The second prize in this year's competition has been awarded to Mr. J. Corston MacKain, A.M.I.Struct.E., A.M.Inst.W., and a third prize will be paid to the assigns of the late Mr. H. W. Clark, M.Inst.C.E., M.Inst.W. (formerly

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Assistant Engineer, Bridges & Structures, London Passenger Transport Board); Mr. Clark was the winner of the Medal in 1944. The fourth prize goes to Mr. R. W. Arden, A.Inst.W.

Sir Robert A. Burrows (Deputy-Chairman of the London Midland & Scottish Railway Company) has accepted the Presidency of the Railway Convalescent Homes for 1946, in succession to Sir Ronald W. Matthews (Chairman of the London & North Eastern Railway Company).

#### PULLMAN CAR CO. LTD.

Mr. F. D. M. Harding, O.B.E., has been appointed General Manager of the Pullman Car Co. Ltd. in succession to Mr. G. H. Griffith, C.B.E. The headquarters of the company have been moved from Victoria Station to 10, Mayfair Place, W.1.

#### COLONIAL RAILWAY APPOINTMENT

Mr. E. C. Eve, Senior Clerk, General Manager's Office, Kenya & Uganda Railways & Harbours, to be Administrative Assistant to the General Manager, Nigerian Railway.

#### INSTITUTION OF CIVIL ENGINEERS AWARDS

Among awards made by the Institution of Civil Engineers for papers submitted during the session 1944-45 are the following:-

##### Railway Engineering Division

Trevithick Premiums have been awarded to:-

Dr. Hugh O'Neill, M.Met., D.Sc., for his paper on "Metallurgical Studies of Rails."

Mr. J. Taylor Thompson, M.C., M.Inst.C.E., for his paper on "The Layout of Locomotive Depot Facilities."

A Webb Prize has been awarded to:-

Mr. F. H. D. Page, O.B.E., M.Inst.C.E., for his paper on "Railway Signalling for the Civil Engineer."

##### Maritime & Waterways Engineering Division

For a paper published in the *Journal of the Institution*, a Telford Premium has been awarded to:-

Mr. E. K. Bridge, B.Sc., A.M.Inst.C.E., for his paper on "Charing Cross Railway Bridge: Temporary Repairs to Damaged River Span."

#### SOUTHERN RAILWAY APPOINTMENTS

##### Traffic Department

Mr. W. H. Corney, Chief Clerk, Commercial Superintendent's Office, Waterloo, to be Assistant to Commercial Superintendent, Waterloo.

Mr. P. W. Gessey, Clerk, Commercial Superintendent's Office, Waterloo, to be Chief Clerk, Commercial Superintendent's Office, Waterloo.

##### L.M.S.R. APPOINTMENTS

Mr. J. Briggs, Assistant Engineer (Permanent Way), Chief Civil Engineer's Department, Watford H.Q., to be Assistant Engineer, Chief Civil Engineer's Department, Watford H.Q., in place of Mr. E. H. d'E. Darby, retired.

Mr. H. B. Everard, Senior Assistant (Permanent Way), Chief Civil Engineer's Department, Watford H.Q., succeeds Mr. Briggs as Assistant Engineer (Permanent Way), Chief Civil Engineer's Department, Watford H.Q.

Mr. W. H. Best, Assistant to District Engineer, Liverpool, to be Senior Assistant (Permanent Way), Chief Civil Engineer's Department, Watford H.Q., in place of Mr. Everard.

## Central Argentine Railway Limited

The annual general meeting of the Central Argentine Railway Limited was held at Winchester House, Old Broad Street, E.C.2 on November 8. The Rt. Hon. Lord Forrest, Chairman of the company, presided.

The Chairman, after expressing regret at the retirement of Mr. W. Howard-Williams, C.B.E., from the Chairmanship, said:-

Both receipts and expenditure show a considerable increase over last year's figures. That this should be so, follows naturally from the arrangement which Sir Montague Eddy concluded last year with the Argentine Government, by which the companies were granted an increase of 10 per cent. on goods, parcels, and livestock rates, to enable them to meet increases in wages and salaries estimated to amount roughly to an equivalent sum. As a result of an arrangement by which all companies pay into a joint account the produce of the increased rates and draw out of that account the sums required to meet the increased wages and salaries, this company has neither lost nor gained in respect of the year's working under this head.

We have been faced during the year with the same problems as have been described to you on other occasions during the years of war. As the result of progressive deterioration of road services, it fell to the railways of Argentina to meet virtually all internal transportation requirements—on a steadily ascending scale, and under the increasingly difficult conditions imposed by the protracted course of the war. At no stage in the long history of these railways have they been called on to deal with traffics in such huge volume, with such inadequate materials, or at so incommensurate a return.

##### SUPPLY DIFFICULTIES

Difficulties of supply have resulted in a large number of our locomotives being laid up from lack of tyres, axles, boiler tubes, and spare parts in general. The active proportion of the locomotive stock dropped during the course of the war from 565 as at June, 1939, to 458 and 460 respectively in the same months of 1944 and 1945. An undue proportion of our wagons has been occupied in carrying wood for our own use as fuel; and these two factors have prevented us from carrying many tons of traffic that were available. In fact, at this time we have on our books something like 1,500,000 tons of unfulfilled orders.

The position as regards spare parts is, I am glad to say, showing signs of improvement, and the receipt of materials from the United Kingdom and United States is gradually leading to the return of locomotives to service; but there is a long way to go before the position can reach normal.

Meanwhile there has been no sign of any reduction in the cost to us of our fuel and our essential materials. Coal has been increasingly hard to obtain and our fuel bill was £2,700,000, as compared with £740,000 in 1939-40, an increase of nearly £2,000,000. In view of the virtual exhaustion of the scattered forest zones from which firewood hitherto had been drawn at many points on the company's system, the opening up of production in the large virgin areas served by the Seghezzo branch on the Forres line, provided an invaluable, steady flow of wood fuel, which alone furnished the major part of the deliveries.

During the year under review we have succeeded in keeping up with the payment of interest on the 4 per cent. debenture

stock, and we have also, since we last met, paid off the arrears in respect of one year and eight months of the interest on the 5 per cent. stock, that is to say, up to the end of 1941. We remain, however, under the necessity of keeping the moratorium in force, and on November 29 we propose to meet our debenture-holders and seek a renewal of the scheme of arrangement which comes to an end on December 31 next.

##### MR. RONALD LESLIE'S REPORT

My colleague, Mr. Ronald Leslie, who as you know was for many years General Manager, has recently returned from a stay of several months in Argentina, and he tells us that our track and our rolling stock, though of necessity showing certain signs of the starvation that has been imposed on them, surprised him by the comparative excellence of their condition. I will read you some extracts from his report, dated last September:-

*Visiting the Line.*—After the beginning of the New Year, accompanied by the General Manager, I visited all the important parts of the line. The principal impressions derived therefrom and from subsequent conversations in Buenos Aires were as follow:-

*Permanent Way.*—The condition as a whole, though there is rough riding in places, is much better than might be expected considering the extent we are behindhand with the relaying programme. The relaying work which has been carried out has removed some of the worst spots, and we are also reaping the advantage of welded rails and the greater mobility and efficiency resulting from motor gang trolleys. There is general testimony that the rail-welding plant is one of the best bargains we have made, not only because of the smooth running on long-welded rails, but also because of the great economy from the renewed use of the cropped rails whose worn ends formerly would have caused them to be discarded. The only adverse permanent way feature is a higher percentage than normal of broken rails where relaying is overdue.

##### CONDITION OF ROLLING STOCK

*Engines.*—Though there was an improvement before I left, to the extent that engines were then being returned from shops in greater number than they were entering, the locomotive position remained a critical point of train operation. The number of engines out of service due principally to lack of tyres, tubes, or springs was excessive, and motive power was not available to the extent required in face of pending wagon orders still in excess of 1,000,000 tons during August. New replacement engines are at the moment our most pressing need on the rolling stock side.

*Coaches.*—Though outwardly shabby the passenger rolling stock taken as a whole is still adequate to its work.

*Wagons.*—The wagon position comes between that of the engines and coaches. As happened in 1914-18, the transport of wood is making an undue call on our supply, and is doing the usual damage to the bodies, and repair materials are in short supply. The position, however, is by no means as bad as in the case of engines, and a return to normal fuel supply would afford a big relief.

*Diesel Coaches.*—After a long period of teething troubles our Ganz cars are now giving excellent service and being worked up to the hilt. Unfortunately their success has created its own problem, as the

two-coach sets cannot comfortably carry the passengers offering.

#### THE QUESTION OF FUEL

The fuel position is precarious. Before I left English coal remained out of the question, and wood supplies were being limited by labour difficulties. Our two new wood and sleeper branches should finally give us up to 90,000 tons a month when working all out, equivalent to 30,000 tons of coal, but the production is not constant, as the labour available is scanty and drifts away to other periodical work such as the Tucuman sugar harvest. Scarcity of tyres and petrol also hampers cartage operations in the forests, and the working away of the wood when cut in such quantities, over a single line with few traffic facilities, also presents its own traffic problems.

*Traffic Prospects.*—Mention has already been made of pending wagon orders exceeding 1,000,000 tons. Considering that the last wheat, linseed, and maize harvests for the first time in living memory were all largely failures, this figure is at first surprising. It must be remembered, however, that cereals no longer hold the predominant position in our traffics they used to, having fallen from 61 per cent. of the total tonnage in 1928-29 to 39 per cent. in 1943-44. The last percentage also includes sunflower seed, an unknown traffic in 1929, but now quite a feature of our landscape.

After allowing for increased wood and charcoal traffics, this change has been brought about by the increased industrialisation of the country. This is a favourable factor for us but we must always remember that a substantial, if unknown, amount of this vulnerable traffic will inevitably pass to the roads under normal conditions. In the last 10 years road construction has steadily continued, and more particularly in the vicinity of Buenos Aires has completely altered the character of entire neighbourhoods. Sunflower cultivation has already been referred to as one of the principal innovations to be noticed. It is sown and harvested at much the same time as cereals and is subject to much the same pests. It is, however, a less profitable traffic, nor does its volume at present approach that of our three main crops. Its principal use is to provide cooking oil locally instead of importing it.

Ladies and gentlemen,—You will wish me to thank Mr. Leslie for such a clear and informative picture.

#### STRONGER REPRESENTATION OF THE RAILWAYS

During the year under review steps have been taken to strengthen the representation of the companies in the Argentine. Formerly, the British Argentine Railway Committee on this side, which was composed of the Chairmen of the broad-gauge and Entre Ríos companies, had, as its opposite number in the Argentine, a body known as B.A.R.C. Buenos Aires, consisting of the General Managers and the Chairmen of local committees of the companies. B.A.R.C. London, now known as the British Argentine Railway Council, has been broadened in its basis by the inclusion amongst its members of two representatives from each of the broad-gauge companies instead of only the Chairmen. Its agendas and minutes are circulated to all directors, and any director is at liberty to attend its deliberations.

At the Argentine end, B.A.R.C. Buenos Aires has been replaced by a body known as the Directorio Local, or Resident Directorate. It is to consist of directors from London and the General

Managers of the four companies who have each become Managing Directors with seats on their respective London boards. It is the intention that there shall be one or more London directors constantly in Buenos Aires. To this end prolonged visits were paid during the year to Buenos Aires by Sir Montague Eddy and other directors. One of the objects of thus strengthening our representation in Buenos Aires is to enable more immediate action to be taken in the common interest on matters concerning policy *vis-à-vis* the authorities. I should perhaps add that certain procedure has been laid down for the conduct of the Resident Directorate's business. All matters of finance will continue to be dealt with in London.

#### "UNDERPINNING" BY MITRE LAW

If you will bear with me a little longer I should like to add a few comments on the general situation as I see it. Without a doubt we are nearing a crisis in the Argentine railway industry. For years we have been suffering from the influences of erosion. We have now reached the stage when our underpinning by the Mitre Law is threatened. As you know, the Mitre Law is the one under which the railways enjoy certain tax concessions. These clauses were given a life of 40 years, which expires at the end of 1946. If the operation of these clauses is not prolonged, or some substitute formula arrived at, the railways will become liable to pay national, provincial and municipal taxes, as well as Custom dues. Such taxation, without alleviation in the form of increased earning power, would be a severe burden on our industry. It has been estimated, though with what degree of accuracy I cannot say, that on the expiry of the Mitre Law, the tax burden that might fall on the British-owned railways as a whole would be in the region of 27,000,000 pesos, which at 16 to the £, equals £1,700,000. Our main preoccupation is, therefore, with the Mitre Law.

We are well aware, and in sympathy with, the desire of the Argentine people to have thoroughly modern railway systems. Diesel locomotives, luxury coaching stock, accelerated and heavier goods trains are representative items of what a modern railway system should provide. Throughout many years your railway has been well maintained, but maintenance has inevitably fallen into arrears during the period of the war. We have reason to believe, however, that we can overtake that situation in due course. When it comes to the provision of those improvements which accord with the modern conception of railway service we must say to the people of Argentina, "These items we cannot provide, as our resources will not permit. The remedy is in your own hands. To add those features of modernisation so desirable involves the expenditure of additional capital, and the investing public, who are the ultimate tribunal in these matters, will not invest their capital in an industry that shows no return."

#### EFFECT ON PRODUCE TRANSPORT

While we expect gradually overtaking maintenance arrears, I would warn our Government that this must of necessity be a slow process, a process in which, however, it, along with the Allied Governments, is deeply interested. Argentine produce is needed for our requirements in this country and for the alleviation of the devasted countries of Europe. I would emphasise that without locomotive spares in sufficient quantities, without new locomotives and rolling stock, and without

adequate fuel supplies, there is risk that the required produce of Argentina will not reach her ports in sufficient volume or in time to meet our immediate needs, or those of the Allied Governments.

In fairness, I must add that when I made representations to the then President of the Board of Trade and the Minister of Production at the time, they took immediate action, with the result that those requisitions for spare parts then pending were speeded up in a most satisfactory manner. That spirit of co-operation persists, and we have been able to place a certain number of orders for locomotives and rails with the prospect of reasonably early delivery.

It may interest you to know that the cost of locomotives to-day shows an increase of 65 per cent. over the 1938-9 figure. Rails are up by 66 per cent. Inquiries in the U.S.A., however, show that prices for locomotives of comparable type are at the moment higher than those we have to pay in the United Kingdom.

#### SLOW PROCESS OF READJUSTMENT

Although the end of the war presupposes a gradual return to normal trading and supply conditions, it is becoming evident that the process of readjustment will be very slow—too protracted in fact to relieve working difficulties to any great extent during the current period or bring about any radical improvement in the company's financial returns. Present indications point to early receipt of vital materials in sufficient quantity to enable a steady restoration of engine power to more adequate standards, but the welcome relief in this phase of supply will unfortunately be of little or no avail if haulage effort is still to be circumscribed by fuel shortages, which are more acute now than at any time during the course of the war.

The economy enforced on us during these past years undoubtedly afforded relief to Great Britain in her war efforts. This may be gauged from the fact that the value of articles made in the company's workshops rose from £299,000 in the year 1939-40 to £456,000 in 1944-5, while the value of imported materials, excluding fuel, dropped from £430,000 to £200,000 over the same years; thus representing a lessening of the strain on Great Britain of £383,000 during the period.

I wish to repeat what Mr. Howard-Williams has said on previous occasions, that the shareholders owe a real debt to our officers and to all ranks of the staff for the way in which they have tackled the formidable task of keeping the railway running in the face of almost total lack of certain essential imports.

I have to record the retirement in December, 1944, of Señor Iturbe, our Chief Legal Representative; Señor Iturbe had no less than 32 years' service with your company. He has been replaced by Dr. Matienzo as the new Chairman of the local committee.

I feel I must refer to the splendid unsolicited effort of the Argentine and other non-British staff of this company in their support of the Allied Red Cross Funds. They contributed almost 600,000 pesos, which was surely a practical demonstration of sympathy with the allied cause.

With the termination of the war we should pay a tribute to the members of the staff both in Argentina and London who volunteered. Their total reached 106. Many others were anxious to join the Armed Forces of the Crown, but were prevented due to the important services they were rendering as civilians.

The report and accounts were adopted.

## Ministry of War Transport Accident Report

### Manor Road Crossing, Grays, L.M.S.R.: June 14, 1945

Lt.-Colonel E. Woodhouse inquired into the accident which occurred at about 4.52 p.m. on June 14, 1945, at the Manor Road public level crossing near Grays, on the Tilbury-Barking line of the L.M.S.R. The 4.37 p.m. passenger train, Tilbury to Fenchurch Street, consisting of 11 bogie coaches, drawn by a 2-6-4 tank engine running chimney first, collided with a covered lorry and carried the chassis along in front of it for 234 yd. The lorry driver and the 5 passengers with him were injured—2 passengers fatally—and he and one passenger suffered prolonged detention in hospital. The weather was fine and clear and the accident was due to a mistake on the part of the gateman, who gave evidence frankly and did not seek to excuse himself.

#### PARTICULARS OF SITE

The accompanying drawing shows the site of the accident with other details necessary to an understanding of the case.

The crossing is midway between Grays and Purfleet and is described as a public road (71a) in the London Tilbury & South-

the down line shows "train approaching" when a train has been accepted by West Thurrock Junction and "train in section" when the relative block instruments are at "train on line." The up line indicator works differently and has no "train approaching" indication. It shows "train in section" when the block is at "train on line" and West Thurrock Junction switched out. If that box is open, however, it shows "train in section" when—

- (1) The up home signal there is "off"; or
- (2) The track between that signal and the starting signal is occupied; or
- (3) The sidings ground-frame is released.

A loud sounding bell rings for 5 seconds when the up line indicator goes to "train in section." (West Thurrock Junction was open when the accident occurred).

#### GATEMAN'S INSTRUCTIONS

The gateman is instructed to observe Rules 99 to 107, the effect of which is that

- (i) the gates must be kept closed normally across the road;
- (ii) the gateman must satisfy himself that no train is approaching

Both indicators were normal. He was on his way to the south gate when the bell sounded, but he did not telephone to West Thurrock Junction as he estimated there would be time for the vehicle to cross. He opened the south gate first and the lorry followed him over, rather slowly he thought. He waited for the lorry to clear the north gate and closed it. Turning to go to the south gate he heard the train coming and considered he would not have time to cross over the line. He saw the second lorry at the bend in the road and held up his arms to stop it but without effect. He admitted acting contrary to instructions in opening the gates after the bell had sounded and in doing so in the wrong order, but said he interpreted Rule 101 to apply only to traffic from the main road, that is, from the north. Two men travelling in the lorry stated that they saw nothing of the train, nor did they remember hearing any whistle. The vehicle ran on the crossing without a check at the gate.

The driver of the train was on the fireman's—right-hand—side of the engine, as the fireman was driving under his supervision. He saw nothing of the lorry. The fireman saw it travelling towards the cross-

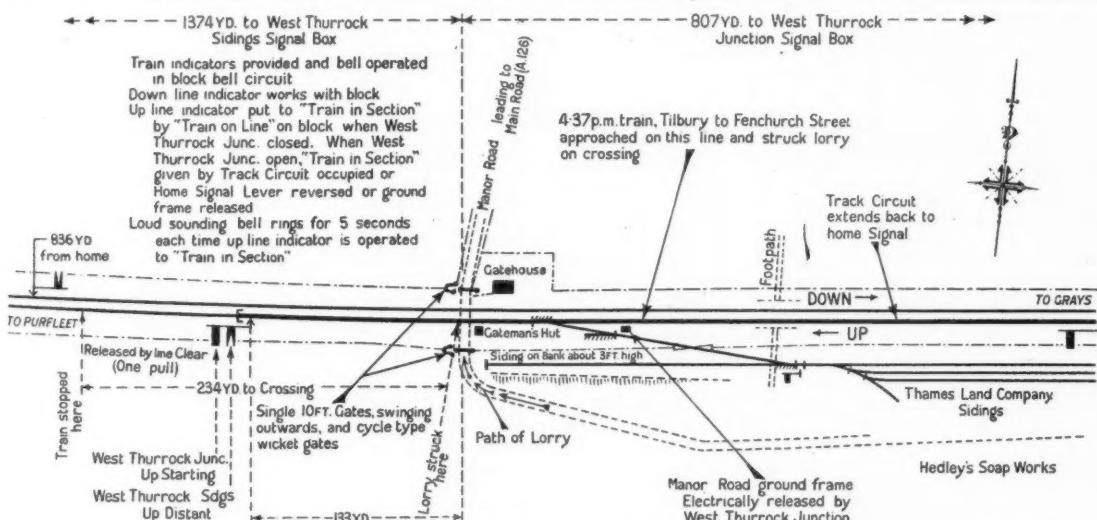


Diagram illustrating circumstances of accident at Manor Road Crossing, Grays, L.M.S.R., on June 14, 1945

end Railway Extension Act of 1852. It appears to have been of little importance originally and leads from the main road (now A126) on the north to the West Thurrock Marshes south of the line. There has been since some industrial development near the crossing; a large soap factory has been built and there is a group of road served private sidings belonging to the Thames Land Company with a wartime coal dump on its property. The crossing has single 10-ft. gates, swinging away from the line, and wickets. There are no signals. The gateman has a hut south of the line with electrical indicators to warn him of trains, and a telephone to West Thurrock Junction, 807 yd. east. The next box westward is West Thurrock Sidings, 1,374 yd. Inter-visibility between railway and road is good, except that the dead-end siding is on an embankment 3 ft. or so high; it contained 8 wagons at the time of the accident. View along the line from the crossing is good, over a mile east and 500 yd. west.

#### WARNING APPARATUS

There is a bell in the block circuit and needle indicator for each line. That for

before opening the gates, and (iii) the further gate must be opened first when a vehicle requires to cross, but if there are vehicles approaching from both directions the gateman must use his discretion in the matter.

The instructions also state that when either indicator is not in the normal position the gates may not be opened without permission from West Thurrock Junction, when that box is switched in, and that if permission has been so obtained that box is to be advised when the gates are again closed and secured. When that box is closed, however, the gates may not be opened unless both indicators are normal, or until a train which is indicated as being approaching or in section has passed clear of the crossing. Should the gates be open when an indicator moves from normal they must be closed again immediately.

#### CIRCUMSTANCES OF THE ACCIDENT

The gateman, aged 63, and slightly infirm, had been employed in that capacity for 18 months. He said another lorry passed in the same direction—northwards—just before the accident. He was in his hut when he saw it approach and stop.

ing parallel with the train and had no reason to believe it was not going to stop. Both men estimated the speed at about 35 m.p.h. and said the whistle was sounded, as prescribed for all crossings between West Thurrock Junction and Purfleet.

#### INSPECTING OFFICER'S CONCLUSION

The gateman failed to carry out the instruction that the gates were not to be opened without the signalman's permission when an indicator showed a train to be approaching. Had he, however, taken the precaution of opening the further gate first and closing the gates in the reverse order the second lorry would have been kept off the crossing. Responsibility, therefore, rests on him. Employed in a temporary capacity since November, 1943, he had been properly instructed. As a matter of routine he had been watched in the performance of his duties from time to time and found to be carrying them out properly.

#### RECOMMENDATION AND REMARKS

Industrial activities have given rise to considerable traffic over the crossing and rail traffic serving Tilbury is also fairly

heavy. A census taken between 2.45 and 5.45 p.m. a few days after the accident showed 14 trains as passing during the 3 hours, while 37 motor vehicles, 10 cycles and 4 pedestrians crossed the line, the gates being opened 27 times. When Colonel Woodhouse visited the site there was a period of perhaps 10 minutes during which the gates could not be opened while a train was shunting into the sidings; 7 lorries and cars arrived and were delayed. He considers, therefore, that the time has come to provide gates swinging across the

line with interlocked signals, or interconnected with the existing signalling arrangements in some way.

A proposal to provide an over-line bridge was under consideration before the war. A short distance west of the crossing there is an unfinished embankment leading from the main road towards the railway, with another in prolongation south of the line. The latter embankment forks, one branch leading towards the siding and soap works; on the alignment of the other, which continues in a southerly direction, a road

bridge, dated 1939, has been built over the siding leading towards the coal dump. Colonel Woodhouse was informed that these works were put in hand by the Thames Land Company to replace the level crossing and two adjacent footpath crossings in connection with the development of their property, but the war stopped them. A bridge is obviously far more convenient and safer, but unless it is the intention to resume work on it without delay the improvements he recommends should not, he considers, be deferred.

## Parliamentary Notes

### Government's Civil Aviation Policy

The House of Lords on November 6 resumed the debate on the Government's civil aviation policy.

The first speaker was Lord Balfour of Inchrye, who said that the Government had selected for experiment in socialisation the most unsuitable industry and national activity of which it could have thought. It had selected an industry at its very beginning, in which the qualities of tenacity and of adventure, which certainly could not be found in the pigeonholes and behind the desks of Whitehall, were essential for the national well-being. The Government had ignored the need of having within our own national boundaries a system of internal air lines and of taking advantage of the great experience of other surface interests in the direction of running transport. It also seemed to be ignoring the services of those who had worked on the problem and were still willing to risk and adventure for the chance of final success. All that was for the fulfilment of a political theory to be accomplished at all costs, including the cost of national well-being.

The three corporations to be formed were to be directed by the Government as to policy; they were to have on their boards Government nominees appointed (and if he did not like them, subsequently removed) by the Minister for Civil Aviation—or he could remove them if they did not fit into his exact Socialist pattern—and they were to be Government financed. He certainly did not envy the gentlemen who accepted seats on the boards of those Corporations; they would be, he thought, what were known in impolite circles in the City of London as "dummy directors." These would be nothing more or less than "phoney" boards, because they would not be masters in their own houses. Whitehall was the least suitable body to judge when British commerce needed expansion and development.

He asked what was going to be the position of the railways and shipping interests. He understood that they were excluded from sharing in operation and the Government had rejected the idea of a complete partnership of surface railway and marine interests with those of the air. Apparently, the Minister was in the process now of inventing some formula regarding which he understood talks were not taking place with surface interests. The Minister in his speech said that the railways and other surface interests were to be integrated, they were to be co-ordinated; but they were not to participate in the actual responsibility for operation. It seemed to him the railways and the surface interests generally, who could contribute much to this problem, having years of experience of transportation matters, were to be, as it were, the willing handmaids of Whitehall. It was a little hard for those concerned with our railways to have to

face a situation in which they were asked to be junior partners without any responsibility and without any participation—except, no doubt, in blame if things went wrong—when they knew that the Government's programme put their heads on the block about two years from now.

It was generally admitted in both Houses of Parliament and throughout the country that the railways had played a magnificent part in this war. Impartial experts said that, broadly, our railway system was the finest in the world, and he thought it ill-befitted Lord Winster to say that our railways had developed under a wild scramble and had suffered from that handicap ever since, to achieve some political prejudice and help his particularly weak case.

The Government was creating with its policy two new classes in the community. They were creating the "untouchables"—those who were allowed within the magic circle of commercial aviation, and the pariahs, those people connected with the railways, with shipping and the ordinary world of commerce, who were so anti-social as to wish to participate in and contribute to the essential air supremacy of this country.

Lord Reith said that Lord Winster was charged with jettisoning the transport experience of railways and shipping and travel agencies. Incidentally, there were all sorts of problems in air transport which were not found in surface transport, and they should remember that there are 22 years' accumulation of experience in Lord Knolly's corporation. Undoubtedly, surface experience was valuable. Was it only to be given in return for the somewhat doubtful privilege of being permitted to finance air routes in Europe and to South America? Might they await the outcome of the Minister's conversations with those other interests? Might they be permitted to hope that the experience of the railways, of the shipping lines and of the travel agencies would be available to him and that the co-operation of which he had announced himself to be in need and anxious to secure was assured? He would think that those other interests would give it and that they would have welcomed the opportunity.

Referring to public corporations, Lord Reith said that with him, the simple issue was that of securing the most efficient form of management. There was a high ideal of public service in many private enterprises, particularly, he felt, in railways. But they could not get away from the fact that their first and unmistakable obligation was to shareholders. There were some who felt that the first obligations of public service to shareholders was something morally indefensible and undesirable. He was less concerned with that than the economic side. The position of directors and managers was becoming increasingly invidious to-day with, on the one hand, their own ideals of public service, and their knowledge of public requirements and, on the

other, the natural, but hungry, expectations of shareholders.

The Marquess of Londonderry suggested that a Civil Air Council should be set up as soon as possible so as to be able to get the best advice from persons fully trained in these matters, from those people who were not in business for the profit motive alone but because of their love of aviation and because they believed that the future of this country was dependent on the successful development of aviation here.

He denied that the Government had any right to say that because they had a majority of 190 or so votes in the House of Commons they had, therefore, a direct mandate for the nationalisation of civil aviation.

Lord Brabazon of Tara said that it seemed to him that the Minister had, so to speak, copied Viscount Swinton's plan in a rather half-baked way. There was no real reason for three corporations. There was some reason for dividing traffic into four separate groups. Why he objected to the corporations was that some of them would be financially successful—the one in Europe, for example, carrying, as it would, big load factors, ought to be very successful—whilst others would not do so well. The consequence would be that they would get between the corporations a very unhealthy feeling. He should have thought that it would be desirable to have an overriding organisation which would have the separate groups subordinate to it, so that there would be only the one organisation with which the Minister would have to speak.

Viscount Addison (Secretary of State for Dominion Affairs and Leader of the House) defended the Government's policy. He said it was not a new thing. It had been advocated for years. Were they more likely to get the development of a thoroughly reliable and safe service by having the continual oversight of an organisation which was subject to Parliamentary control? Or would it be better if they left it to a miscellaneous assortment of private companies who would like to develop the service on their own?

The Earl of Glasgow said that the Scottish people did not wish to have nationalisation of Scottish aviation on the English model, and run from Whitehall. They had, in Prestwick, an international airport, the operators of which had had six years' experience of running it, and they wished to use the experience they had gained for the advancement of the interests of the Scottish people.

Lord Sherwood said he could not see that because the railways and shipping companies were not brought into the present Winster plan it was necessarily going to be a failure. He had been through the list of directors of these railway and shipping companies, and it did not give him any confidence that they were the people who were going to put civil aviation where England expected it to be. If civil aviation

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was going to succeed they had to be completely air-minded about it.

Lord Winster (Minister of Civil Aviation), winding up the debate, said that his personal view was that the surface transport interests would take a larger view of their public responsibilities than Lord Swinton appeared ready to credit them with willingness to do so. It would be his intention, as he had made it his practice with the Chairman of the B.O.A.C., to be most fully accessible to the Chairmen of the Corporations. The B.O.A.C. had been operating routes without partners, and operating them with complete success. If a publicly-owned corporation had shown the ability to do that, he could not understand why other corporations under public ownership should not.

He did not regard it as part of the Minister's duty to interfere with the day-to-day administration of the corporation.

The B.O.A.C. intended to operate a transatlantic air service, *via* Prestwick, but the number of services operated would depend on the traffic offering. As regards foreign operators, the Swedes had asked permission to use Prestwick this winter for a series of experimental flights across the Atlantic, and that permission had been given.

The statement he had made on compensation would be elaborated in the White Paper which he would be issuing, and, after that, the details of it would be embodied in legislation when there would be every possibility of discussing the matter.

## Questions in Parliament

### Rations for Railway Horses

Lt.-Colonel Sir Thomas Moore (Ayr Burghs—C.) on October 25 asked the Minister of Food what was the present number of horses obtaining rations in England, Scotland and Wales, respectively, not including horses on agricultural holdings.

Sir Ben Smith (Minister of Food) in a written answer stated: The number of horses receiving rations at August 31, 1945 (the latest date for which summarised particulars are available) were as follows:—England, 93,650; Scotland, 12,076; Wales, 8,254. Rations were also being provided for 9,213 horses owned by the four principal railway companies.

### Requisitioned Cross Channel Vessels

Sir Ralph Glyn (Abingdon—C.) on October 31 asked the First Lord of the Admiralty how many vessels normally employed in the cross-channel and coastwise passenger service around the British Isles were still requisitioned by his department; what number of hospital ships and hospital carrier ships were in regular service; and how soon it proposed to hand those ships back to their owners.

Mr. A. V. Alexander (First Lord of the Admiralty) in a written answer stated: Twelve ships normally used in cross-channel or coastal passenger service are still on Naval service; three of these are foreign owned. Ten hospital ships are in regular service, only four of which are British merchant ships under requisition. The necessity for the retention of requisitioned ships is kept under constant review and the position of hospital ships is under special examination. I hope to be able to release some of them at an early date. The subsequent disposal of de-requisitioned ships would be a matter for the Ministry of War Transport. There is, in addition, a number of hospital ships and hospital carriers under Army control.

### Ministry of Civil Aviation Staff

Commander C. N. Shawcross (Widnes—Lab.) on October 24 asked the Parliamentary Secretary to the Ministry of Civil Aviation how many members of the staff of his Ministry had had practical or professional experience in the operation of civil air lines, giving their names, the dates of their appointments and the nature and extent of their experience in each case.

Mr. Ivor Thomas (Parliamentary Secretary, Ministry of Civil Aviation) in a written answer stated: There are 34 members of the staff of the Ministry of Civil Aviation who have had practical or professional experience in various capacities in the operation of civil air lines, for periods ranging from 12 years to three months, the average being just over four years. As regards the remainder of the question, there is a well recognised tradition which precludes public reference by name to individual officers of the Crown services.

### Road Accidents

Lt.-Commander L. W. Joynson-Hicks (Chichester—C.) on November 1 asked the Minister of War Transport whether, having regard to the increasing use of the roads by vehicular traffic, he had any plan which would limit the number of road deaths which might otherwise be anticipated.

Mr. Alfred Barnes (Minister of War Transport) in a written answer stated: Yes, Sir. In present circumstances the line which is likely to have the most immediate and fruitful results is an intensive propaganda campaign of an educative character. Such a campaign is being launched in a few days.

### Standing Passengers on London Buses

Captain L. D. Gammans (Hornsey—C.) on November 5 asked the Minister of War Transport if the action being taken by conductors of the London Passenger Transport Board to prohibit or restrict passengers standing in buses was with the agreement of his Ministry, and what steps he proposed to take to provide sufficient transport for the people of London, especially during the rush hours.

Mr. Alfred Barnes: Any such action on the part of conductors in refusing to carry any standing passengers at off-peak hours is without authority. I should explain, however, that to ease the strain on the staff, I have agreed with the Board that the number of standing passengers shall be reduced from 12 to 8 at off-peak periods. This comes into force on Saturday. Details have already appeared in the Press. As regards the second part of the question, the Board's services are being improved as fast as new staffs become available.

Captain Gammans: Since the action now being taken appears to be quite illegal, is this another example of the Transport & General Workers' Union having lost all control over its Members?

Mr. Barnes: I do not think Captain Gammans is at all entitled to draw that conclusion. After all, this is a Private Notice Question, and I have not had very long to look into the circumstances.

Mr. Evelyn Walkden (Doncaster—Lab.): Would the Minister look into this question again? Is it not apparent that the difference between the bus workers, on the one hand, and his Ministry, on the other, is whether eight people or five should stand, and at the moment, as he says eight, they say that none at all may stand? Cannot we have reason brought to bear, if the difference is only three, and have goodwill all round?

Mr. Barnes: If Members will take the trouble to read my reply to this question,

they will see what are the facts at the present moment, and that any action taken before next Saturday is unauthorised. The repercussions of this will continue to receive my attention.

Mr. Walkden: I hope they will.

Mr. R. R. Stokes (Ipswich—Lab.): Will the Minister explain to the House why it is necessary, in view of the very great inconvenience to a large number of travellers, for this to come into force only on Saturday? Is it not possible to make it applicable a little earlier?

Mr. Barnes: This does not add to the comfort of passengers, because many passengers who hitherto have been carried on the buses may not find themselves able to procure even standing room. One has to balance the advantages and disadvantages of a proposal of this kind, and Saturday is a very good day to bring in the change.

### Government Public Relations and Press Officers

Major Sir Basil Neven-Spence (Orkney & Shetland—C.) on November 1 asked the Secretary to the Treasury, if he would state the number of persons now employed in the Public Relations and Press departments in every Government department, with the total cost of this provision.

Mr. Glenvil Hall (Financial Secretary to the Treasury) in a written answer stated: The following table gives for all departments, other than the Ministry of Information, the particulars asked for. The totals given are in respect of whole-time staff, including Regional as well as headquarters staff, as at October 1, 1945. The figures for the Service Departments include Home but not Overseas Commands. Most of the totals of annual cost are approximate.

Department	Staff engaged on Public Relations and Press Work	Annual cost
Admiralty	82	£44,945
Ministry of Agriculture & Fisheries	63 (A)	22,000
Air Ministry	142 (B)	77,687
Ministry of Aircraft Production & Supply	66 (C)	28,638
Ministry of Civil Aviation	3	1,485
Colonial Office	14	7,413
Dominions Office	3	1,430
Ministry of Education	5	2,473
Ministry of Food	70	25,183
Foreign Office	11	8,743
Ministry of Fuel & Power	15	4,829
Ministry of Health	19	8,368
Home Office & Ministry of Home Security	8	5,018
India Office	15	6,888
Inland Revenue	2	1,995
Ministry of Labour & National Service	24	12,248
National Savings Committee	81	34,375
Department of Overseas Trade	6	3,360
Ministry of Pensions	3	1,503
Post Office	13	9,023
Ministry of Town & Country Planning	7	4,750
Board of Trade (including Ministry of Production)	40	17,471
Treasury	1	1,090
War Damage Commission	2	1,318
War Office	225	85,000
Ministry of War Transport	13	6,293
Ministry of Works	11	4,976
Scottish Home Department	9	5,000
	954	£434,780

(A) This figure includes a staff of 51 costing £17,300 a year engaged on informing and advising the farmers and domestic food producers through all available media as to the best and most efficient methods of food production.

(B) Excluding the staff of the Photographic Dark Room (numbering 23) and of the R.A.F. Film Production Units (290 at home) who are partly engaged on work of a public relations nature.

(C) Includes 18 staff (cost £7,642) employed in the Publicity & Campaign Branch of the Directorate of Salvage & Recovery.

November 16, 1945

## Notes and News

**Senior Storekeeper Required.**—A senior storekeeper is required by the Nigerian Government Railway for two tours each of 12 to 24 months residential service with possible permanency. For full details see Official Notices on page 523.

**Buenos Ayres Great Southern Railway.**—This company has announced the payment of 2 per cent. on the 4 per cent. debenture stock and 2½ per cent. on the 5½ per cent. redeemable debenture stock, both less tax, for the half-year to December 31 next.

**Carriage & Wagon Engineer Wanted in Brazil.**—A carriage and wagon engineer as district assistant is required by an important British-owned railway in Brazil. Applicants should have practical workshop and drawing office experience. See Official Notices on page 523.

**Vacancy in Brazil for a Running Shed Inspector.**—A running shed inspector is required by an important British-owned railway in Brazil. Applicants should have practical knowledge of repair work and footplate experience. See Official Notices on page 523.

**Locomotive Engineers Wanted in Brazil.**—Two locomotive engineers as district assistants are required by an important British-owned railway in Brazil. Applicants should have practical workshop and drawing office experience. See Official Notices on page 523.

**S.R. "West Country" Class Locomotive Named "Yeovil."**—At a recent naming of the "West Country" class locomotive, Yeovil, the ceremony was performed by the Mayor of Yeovil, Councillor W. S. Vosper, J.P., who is a Fitter in the Southern Railway Company's Gas & Water Department at Yeovil. Although all the British railways have locomotives named after towns and cities, this is probably the first occasion on which a railwayman has been Mayor of a town during the year when an engine has been named after that town. On the occasion of the naming ceremony, the Great Western Railway was represented by Mr. R. G. Pole, Divisional Superintendent, Bristol, and Mr. H. N. S.

**S.R. "West Country" Class Engine Named "Yeovil"**

The Hon. Clive Pearson, a director of the Southern Railway Company, shaking hands with the Mayor of Yeovil. On the extreme right is Mr. E. C. Cox, formerly Traffic Manager of the Southern Railway (see accompanying paragraph)

Edwards, Divisional Locomotive Superintendent, Bristol. Mr. E. C. Cox, formerly Traffic Manager of the Southern Railway, who lives in the neighbourhood, was also present at the ceremony. Naming ceremonies for two more of the Southern Railway "West Country" class engines were performed at Launceston and Bude on November 2. The engines were named Launceston and Bude respectively.

**Assistant Wharf Superintendent Required.**—An assistant wharf superintendent is required by the Government of Sierra Leone for the railway department for one tour of 12 to 24 months residential service in the first instance. For full details see Official Notices on page 523.

**Air Service to Ireland.**—The Croydon-Dublin service of Aer Lingus Teoranta (Irish Air Lines), which was suspended during the war, reopened on November 9. The service will be run with "DC3" aircraft, carrying 21 passengers, and will be flown every day except Sundays in each direction. The fare is £6 10s. single and £11 15s. return.

**Argentine North Eastern Railway.**—The directors of the Argentine North Eastern Railway Co. Ltd. have decided to pay on November 26, 1945, the interest for the six months ended December 31, 1935, on the 5 per cent. "B" debenture stock and debentures together with 5 per cent. per annum interest thereon, amounting in total to £3 14s. 9d. per £100, less tax.

**Night Hostel for G.W.R. Locomotive Men.**—A new hostel for locomotive men whose turn of duty takes them away from their home stations for a night is to be built by the G.W.R. at Severn Tunnel Junction. The hostel will provide sleeping accommodation for 50 men, and also contain a restaurant, canteen, bathrooms, drying rooms, and a writing and rest-room. Allotments for men interested in gardening will be available for locomotive men using the hostel frequently.

**Road Accidents in September, 1945.**—The return issued by the Ministry of War Transport of the number of persons reported to have died, or to have been injured, as a result of road accidents in Great Britain during the month of Septem-

ber last, shows 452 deaths (compared with 478 in September, 1944), 3,184 seriously injured (compared with 2,668 in September, 1944), and 10,241 slightly injured (compared with 7,101 in September, 1944).

**Electric Locomotives in Norway.**—Subsequent to the announcement by the Director-General of the Norwegian State Railways, already referred to in our columns, that electrification of all main railway lines in Norway is to be undertaken

**British and Irish Railway Stocks and Shares**

Stocks	High 1945	Lowest 1945	Prices	
			Nov. 13, 1945	Rise/ Fall
<b>G.W.R.</b>				
Cons. Ord. ...	62½	55	55	—
5% Con. Pref. ...	122½	114	107	+ 3
5% Red. Pref. (1950) ...	110	104	103	—
5% Rt. Charge ...	135½	128	124½	+ 1
5% Cons. Guar. ...	134½	125	122½	+ 1
4% Deb. ...	118½	112	111½	+ 1
4½% Deb. ...	118½	114	113½	+ 1
4½% Deb. ...	124½	119	117	—
5% Deb. ...	137	129½	127	+ 1
2½% Deb. ...	77	73½	81½	—
<b>L.M.S.R.</b>				
Ord. ...	34½	27½	27	—
4% Pref. (1923) ...	64½	55	56½	+ 1
4% Pref. ...	81	72½	75½	+ 1
5% Red. Pref. (1955) ...	105½	102	101½	+ 1
4% Guar. ...	107½	99½	100½	+ 1
4% Deb. ...	111½	104	105½	+ 1
5% Red. Deb. (1952) ...	111	108	105½	+ 1
<b>L.N.E.R.</b>				
5% Pref. Ord. ...	10½	7½	6	—
Def. Ord. ...	5½	3½	3½	—
4% First Pref. ...	68½	55½	55½	+ 1
4% Second Pref. ...	35½	28½	28	+ 1
5% Red. Pref. (1955) ...	101	97½	98	+ 1
4% First Guar. ...	101½	96½	99½	+ 1
4% Second Guar. ...	95½	88½	93	+ 1
3% Deb. ...	88½	80	91	+ 1
4% Deb. ...	110½	103½	105	+ 1
5% Red. Deb. (1947) ...	105½	101	101	—
4½% Sinking Fund Red. Deb. ...	107	104½	104½	—
<b>SOUTHERN</b>				
Pref. Ord. ...	80½	71½	73	+ 1
Def. Ord. ...	26½	23	23	—
5% Pref. ...	122	113½	106	+ 3
5% Red. Pref. (1964) ...	117½	112	109½	+ 1
5% Guar. Pref. ...	134	125½	123½	+ 1
5% Red. Guar. Pref. (1957) ...	115½	112	108½	+ 1
4% Deb. ...	118	110	111	+ 1
5% Deb. ...	135½	127	127	—
4% Red. Deb. (1962-67) ...	111½	107½	107½	—
4% Red. Deb. (1970-80) ...	112	108½	108½	—
<b>FORTH BRIDGE</b>				
4% Deb. ...	107	103	104	—
4% Guar. ...	106½	102	103	—
<b>L.P.T.B.</b>				
4½% "A" ...	125	119	121½	+ 1
5% "A" ...	133½	128	130½	+ 1
3% Guar. (1967-72) ...	99½	98	99	—
5% "B" ...	124½	118½	120½	+ 1
"C" ...	72½	64½	64	+ 2
<b>MERSEY</b>				
Ord. ...	35½	33	32	—
3% Perp. Pref. ...	72	66	69	—
4% Perp. Deb. ...	105	103	104	—
3% Perp. Deb. ...	85½	79½	80	—
<b>IRELAND* BELFAST &amp; C.D.</b>				
Ord. ...	9	6	7½	—
<b>G. NORTHERN</b>				
Ord. ...	33½	19	33½	+ 2½
Pref. ...	49	37	48½	+ 1
Guar. ...	70	57½	78½	+ 1
Deb. ...	90½	81½	95	—
<b>IRISH TRANSPORT</b>				
Common ...	—	—	78	+ 1½
3% Deb. ...	—	—	100½	+ 1½

\* Latest available quotation

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## THE RAILWAY GAZETTE

## OFFICIAL NOTICES

None of the vacancies on this page relates to a man between the ages of 18 and 50 inclusive unless he is excepted from the provisions of the Control of Engagements Order, 1945, or the vacancy is for employment excepted from the provisions of that Order.

## Overseas Employment

**SENIOR STOREKEEPER** required by the Nigerian Government Railway for two tours, each of 12 to 24 months residential service, with possible permanency. Salary, £750 by £30 to £840 a year. On a salary of £750 a local allowance of £24 a year and a separation allowance for married men of between £60 and £180 a year, according to number of dependants are payable. Free passages and quarters. Candidates must have had at least ten years railway storekeeping experience in an executive position associated with material supply and distribution, and must have a knowledge of Mechanical and Civil Engineering Stores. Applications, which must be in writing, stating date of birth, full details of qualifications and experience, including present employment; also Identity and National Service or other registration particulars, and quoting reference N.E.A.96, should be addressed to the Ministry of Labour and National Service, London Appointments Office, 1-6, Tavistock Square, W.C.1. (29.10.44)

immediately, it is announced by the Director-General, quoted by Oslo radio, that the building of locomotives in Norway is to be confined to that of electric engines.

**L.N.E.R. Chief General Manager's Office.**—As from Monday, November 19, the address of the L.N.E.R. Chief General Manager's Office formerly at H.Q.1 (*via* Hitchin) will be Dorset Square, London, N.W.1. The telephone number will be: Paddington, 1831 and the telegraphic address: Eastern London.

**British Diesel Electric Locomotives for Egypt.**—By a printer's error the maximum speed with a passenger train of the general-service diesel electric locomotives ordered by the Egyptian State Railways from the English Electric Co. Ltd. was given in our last week's issue (p. 470) as 15 m.p.h. instead of 75 m.p.h.

**Kings Cross-Fort William Through Sleeping Car.**—A through sleeping car, with first and third class accommodation, is now being run between Kings Cross, L.N.E.R., and Fort William on Fridays only, attached to the 7.30 p.m. train from Kings Cross. This sleeping car service commenced on November 9. In the reverse direction a sleeping car is being attached to the 2.56 p.m. train from Fort William on Mondays only.

**The English Electric Company's Exhibition.**—On November 7, Sir George Nelson, Chairman & Managing Director of the English Electric Co. Ltd., invited representatives of the Press to a preview at Queen's House, Kingsway, London, of an exhibition of the company's wartime activities together with a group of its peacetime industrial and domestic electrical products. The story of the past war is unfolded by a series of pictorial panels, and the company's extensive services rendered in connection with the events portrayed shown by photographs and models. The exhibition will open to the public for one month from November 19.

**Visits to the Channel Islands.**—Temporary visitors from the United Kingdom can now obtain exit permits for travel to the Channel Islands, on production of a certificate that sleeping accommodation has been reserved for them. This restriction is being maintained for the present because of the shortage of housing and hotels on the Islands. It is hoped that the Islands will

## Overseas Employment

**ASSISTANT WHARF SUPERINTENDENT** required by the Government of Sierra Leone for the Railway Department for one tour of 12 to 24 months residential service in the first instance. Salary, £400, rising to £600 a year. Cost of living and separation allowances are payable. Free quarters and passages. Candidates must be capable of the efficient oversight of fixed and mobile cranes; Lister trucks and tow motors; cargo operations in sheds and on wharves, and the loading to rail and road. They should also be capable of handling staff employed on the maintenance and operation of cranes.

Written applications (no interviews), giving the following essential details: (1) Full name; (2) Date of Birth; (3) Qualifications and experience; (4) Name and address of present employers; (5) Details of present work, should be sent to The Secretary, Overseas Manpower Committee (Ref. 5600), Ministry of Labour and National Service, York House, Kingsway, London, W.C.2. Applications cannot be acknowledged.

## BRAZIL.

**R**EQUIRED by important British-owned Railway, two Locomotive Engineers as District Assistants. Should have practical workshop and drawing office experience. Preference given to single men under 30. Commencing salary, £600-£700 per annum, according to qualifications.—Write, giving full particulars of past experience: Box 1611, *The Railway Gazette*, 33, Tothill Street, Westminster, London, S.W.1.

## BRAZIL.

**R**EQUIRED by important British-owned Railway, Carriage and Wagon Engineer as District Assistant. Should have practical workshop and drawing office experience. Preference given to single man under 30. Commencing Salary, £600-£700 per annum, according to qualifications.—Write, giving full particulars of past experience: Box 511, *The Railway Gazette*, 33, Tothill Street, Westminster, London, S.W.1.

## BRAZIL.

**R**EQUIRED by important British-owned Railway, Running Shed Inspector. Should have practical knowledge of repair work and footplate experience. Preference given to single man under 30. Commencing Salary, £600-£700 per annum, according to qualifications.—Write, giving full particulars of past experience: Box 1145, *The Railway Gazette*, 33, Tothill Street, Westminster, London, S.W.1.

be able to receive summer visitors in 1946 as in pre-war days. Application for permits should be made to the Passport & Permit Office, Dartmouth Street, London, S.W.1. Persons who left the Islands to stay in the United Kingdom during the repatriation of evacuees may now return, and should apply to the Immigration Officer, Jersey or Guernsey, for the necessary facilities.

**Central Uruguay Railway Company of Monte Video.**—The directors announce that, in accordance with article 5 of the scheme of arrangement, payment will be made on December 5, 1945, of one year's arrears of interest on the four-and-a-half per cent. first debenture stock in respect of the period from January 1 to December 31, 1943.

**Accident at Woking, Southern Railway.**—Normal working was restored early on November 11 on the Southern Railway line at Woking, after an accident which occurred on November 10, when a Waterloo—West of England train ran into the rear of one bound from Waterloo to Southampton. About thirty persons are reported to have been injured. The fact that the front train was moving prevented a more serious accident.

**G.W.R. (Extension of Time) Order.**—The Minister of War Transport has made the Great Western Railway (Extension of Time) Order, 1945 (S.R. & O. 1945, No. 1246) extending by three years the time limited by Section 40 of the Great Western Railway Act, 1937, as extended by the Great Western Railway (Extension of Time) Order, 1942, for the completion of the railways authorised by section 5 of the said Act of 1937. Copies of the Order may be obtained from the Clerk of Stationery, Ministry of War Transport, Berkeley Square House, London, W.1, price 1d. (post free 2d.).

## Contracts and Tenders

David Brown & Sons (Huddersfield) Ltd. has removed its London office to Haymont House, 3, Panton Street, Haymarket, London, S.W.1. The telephone numbers are Whitehall 5061/2/3 and the telegraphic address is Dabrogears, 'Phone, London.

The new Northern Ireland Service Depot of Specialloid Limited has been opened at 32, Linen Hall Street, Belfast. Mr. F. W.

Callaway, District Engineer for the territory, will be in charge. The company's main distributor for the Northern Ireland area is the Modern Tool & Equipment Co. Ltd., 7, Cromac Square, Belfast.

Below is a list of orders placed recently by the Egyptian State Railways:—

S. & C. Bishop & Co. Ltd.: Gauge glasses.  
Imperial Chemical Industries Limited: Sulphuric acid.

Siemens Bros. & Co. Ltd.: Filament lamps, gauge pliers, etc.  
Associated Locomotive Equipment Limited: Ball bearings, etc.

Stewarts and Lloyds Limited: Steel tubes.  
Frank Wigglesworth & Co. Ltd.: Texropes.  
Gwynnes Pumps Limited: Diesel pumping sets.

George Spencer Moulton & Co. Ltd.: Rubber spares.  
Metropolitan Vickers Electrical Co. Ltd.: Ammeters.

David Moseley & Sons Ltd.: Rubber spares.  
Colthurst & Harding Co. Ltd.: Paints.

Docker Brothers: Paints.  
North British Locomotive Co. Ltd.: Connecting and coupling rods.

H. J. Skilton & Co. Ltd.: Mild steel, etc.  
North British Rubber Co. Ltd.: Rubber spares.

Benjamin Electric Limited: Reflectors.

J. Stone & Co. Ltd.: Train lighting materials.  
Kendall & Gent (1920) Limited: Screwing and cutting tools.

Arthur Balfour & Co. Ltd.: Screwing and cutting tools.

Joshua Heap & Co. Ltd.: Screwing and cutting tools.

Mulcott Belting Co. Ltd.: Belting.  
George Angus & Co. Ltd.: Belting.

Philips Lamps Limited: Electric lamps.  
B. & S. Massey Limited: Power hammer.

British Metallic Packings Co. (1933) Ltd.: Metallic packings.

Automatic Telephone Manufacturing Co. Ltd.: Benders gauge feelers.

Hancock & Co. (Engineers) Ltd.: Photo-cutting machines.

Buck & Hickman Limited: Tools, etc.

Standard Telephones & Cables Limited: Benders.

R. Melhuish (London) Limited: Screwdrivers, etc.

Whitecross Co. Ltd.: Galvanised-steel wire and cable.

## Forthcoming Meetings

**November 20 (Tue).**—The Institute of Transport, at the Institution of Electrical Engineers, Savoy Place, Victoria Embankment, W.C.2. 6 p.m. "The Economics of Locomotive Working and Running Shed Procedure," by Mr. H. F. Andrews (Student).

## Railway Stock Market

There has been a fair amount of business in stock markets, but movements were generally small and irregular, with buyers showing a tendency to await the outcome of the important Anglo-U.S. talks. Cable & Wireless ordinary and preference stocks continued active and responded to conflicting, but more hopeful, views of the position for stockholders arising from the latest developments. British Funds became easier with further profit-taking in 2½ per cent. Consols and other long-dated stocks; but the belief prevails that when the present savings campaign is completed, further developments in the Government's cheaper money policy can be expected. Steel shares were unaffected by the possibility of a forthcoming increase in domestic steel prices. A sharp rise in Tube Investments was attributed to the imminence of the results; and an easier tendency in Dorman Long to the news that publication of the accounts will be delayed pending the completion of important matters with Government departments.

Colliery shares reflected the easier tendency in shares of companies included in the nationalisation groups. This was due partly to the fear that the Government intends to go ahead with its nationalisation projects as quickly as possible; although on more mature consideration it was felt that full Parliamentary discussion of the important matters involved and the settlement of "fair compensation" for shareholders will prevent any attempt to rush legislation. The prospect of a National Investment Board also had an unsettling influence. According to some

views, however, it may prove as well in the long run if the Government's plans are made known as early as possible.

It is now being suggested that plans for transport nationalisation may be forthcoming towards the end of next year. Among the many problems that will arise from nationalisation is the question of the future of the ancillary interests. Colliery concerns, for example, have important chemical and trading activities, and there are, of course, big ancillary assets, including hotels, owned by the railways.

Meanwhile, however, the assumption persists that on the basis of fair compensation, home rail stocks are probably undervalued at current prices, and that as time proceeds there may therefore be scope for capital appreciation. The position, however, is so complicated and difficult to assess that buyers are hesitant. As a result, home rail stocks have lost further ground, although selling generally appears to have been light. Prior-charges were also lower where changed, partly in sympathy with the easier tendency in gilt-edged this week. Earlier moderate declines in home rail junior stocks, however, tended to attract demand, Great Western and L.M.S.R. ordinary both regaining part of earlier declines.

Great Western after 54½ strengthened to 54¾, which, however, compared with 55 a week ago; the 5 per cent. preference fell back from 110 to 107½, and the 4 per cent. debentures were a point down at 112. L.M.S.R. (27 a week ago) receded to 26½, later firming up to 26¾; the 1923 preference was 57, compared with 57½, and the senior preference 75½, compared with

76, while the 4 per cent. guaranteed declined from 102 to par, and the 4 per cent. debentures were a point down at 106.

L.N.E.R. second preference was 27½, and the first preference lost twice this amount at 55; the 3 per cent. and 4 per cent. debentures were maintained at 91 and 106 respectively. Southern deferred at 23 was unchanged as compared with a week ago. The preferred eased from 73½ to 73, the 5 per cent. preference from 109½ to 106½, and the 4 per cent. debentures from 112 to 110½. London Transport lost its recent firmness, receding from 66 to 64, Metropolitan Assented was fractionally lower at 59½, but Metropolitan Surplus Lands shares rose 1s. to 10s. 9d.

Movements in Argentine rails were small, but the undertone became firmer with debenture stocks attracting better demand. Buenos Ayres Great Southern improved from 11 to 11½, the 5 per cent. preference was better at 24½, and the 4 per cent. debentures after declining to 63½ firmed up to 63½. Central Argentine 5 per cent. debentures were 62, Buenos Ayres Western 4 per cent. debentures 56, after 55½; and Buenos Ayres & Pacific 4 per cent. and 4½ per cent. debentures strengthened to 76½ and 57½ respectively. The ordinary stocks were unchanged. Central Uruguay second debentures rose 1½ to 25½ on the brighter outlook in respect of interest arrears payments. United of Havana 1903 debentures rose from 17 to 18½ on the increased tariffs granted by the Cuban Government, but later receded to 18. Canadian Pacifics at 19½ lost an earlier gain.

Traffic Table and Stock Prices of Overseas and Foreign Railways

Railways	Miles open	Week ended	Traffic for week		No. of Week	Aggregate traffics to date			Shares or Stock	Prices			
			Total this year	Inc. or dec. compared with 1943/4		Totals		Increase or decrease		Highst 1944	Lowest 1944	Nov. 13 1945	Yield % (See Note)
						1944/5	1943/4						
South & Central America													
Antofagasta (Chili) & Bolivia	834	4.11.45	£22,730	+ 360	44	£1,299,460	£1,252,560	+ 46,900	Ord. Stk.	13½	9½	10½	Nil
Argentine North Eastern	753	3.11.45	18,394	+ 356	18	344,081	317,162	+ 26,919	6 p.c. Deb.	6½	4½	8	Nil
Bolivia	174	Oct., 1945	4,472	- 1,028	43	48,577	53,255	- 4,678	18½	7½	8½	Nil	
Brazil									Bonds	19½	15	22	Nil
Buenos Ayres & Pacific	2,771	3.11.45	137,875	+ 6,625	18	2,236,875	2,181,000	+ 55,875	Ord. Stk.	14½	3½	5½	Nil
Buenos Ayres Great Southern	5,080	3.11.45	170,937	+ 5,000	18	3,419,875	3,105,437	+ 314,438	Ord. Stk.	14½	9½	11½	Nil
Buenos Ayres Western	1,924	3.11.45	76,562	+ 6,500	18	1,268,375	1,220,438	+ 47,937	"	13½	9½	9½	Nil
Central Argentine	3,700	3.11.45	(81,053)	+ 14,313	18	3,407,090	3,178,806	+ 228,284	Did.	10½	6½	8	Nil
Do.									Ord. Stk.	5½	4	6	Nil
Cent. Uruguay of M. Video	972	3.11.45	36,780	+ 4,703	18	618,258	555,995	+ 62,263	Ord. Stk.	17½	14½	15	Nil
Costa Rica	262	Sept., 1945	28,214	+ 7,228	14	91,367	74,301	+ 17,066	Stk.	10½	10½	10½	Nil
Dorada	70	Sept., 1945	29,800	+ 50	39	273,135	237,415	+ 35,720	I Mt. Deb.	10½	10½	10½	25 18/3
Entre Rios	808	3.11.45	27,419	+ 4,944	18	471,800	421,531	+ 50,269	Ord. Stk.	6½	4½	6½	Nil
Great Western of Brazil	1,030	3.11.45	31,400	+ 4,400	44	1,087,400	947,500	+ 139,900	Ord. Stk.	38½	23½	26½	Nil
International of Cl. Amer.	794	Sept., 1945	\$615,723	+ \$122,464	39	\$8,687,641	\$5,799,919	+ \$1,067,722	1st Pref.	1½	½	1	Nil
Interoceanic of Mexico									5 p.c. Deb.	88	79	76½	66 10/9
La Guaira & Caracas	223	Oct., 1945	6,135	- 752	43	62,380	78,218	- 15,838	Ord. Stk.	5½	4½	5½	Nil
Leopoldina	1,918	3.11.45	69,692	+ 20,951	44	2,345,003	2,059,009	+ 285,994	Ord. Stk.	5½	4½	4	Nil
Mexican	483	7.11.45	ps566,700	+ ps.92,700	18	ps.2,064,900	ps.9,075,200	+ ps.2,989,700	Ord. Stk.	4½	1½	1½	Nil
Midland Uruguay	319	Sept., 1945	18,431	+ 2,169	13	55,363	51,326	+ 4,037	Ord. Stk.	2½	1½	1½	Nil
Nitrate	382	31.10.45	9,836	+ 4,544	43	155,922	149,724	+ 6,198	Ord. Sh.	75/10	65/10	76/	£3 11/
North Western of Uruguay	113	Sept., 1945	4,379	- 1,043	13	15,562	18,480	- 2,918	Pr. Li. Stk.	79½	68	78½	£7 12/10
Paraguay Central	274	2.11.45	£51,890	- £56,166	18	£1,088,290	£1,045,178	+ £43,112	Pref. Sh.	9	10	9½	Nil
Pervian Corporation	1,059	Oct., 1945	142,092	+ 8,192	17	564,925	508,152	+ 56,773	Ord. Stk.	21/3	13½	16/3	Nil
Salvador	100	Sept., 1945	c 82,000	+ c 10,000	12	c 271,000	c 247,000	+ c 24,000	Ord. Stk.	4	2½	1½	Nil
San Paulo	153½	Oct., 1945	3,025	+ 530	17	9,690	10,735	- 1,045	Ord. Sh.	57½	46	54	£5 11/
Tatia	156	3.11.45	45,384	+ 2,613	18	780,291	844,686	- 64,395	Ord. Stk.	21/3	13½	13½	Nil
United of Havana	1,301	Sept., 1945	1,634	+ 325	13	5,031	4,199	+ 832	Ord. Stk.	17½	13½	20	2½
Uruguay Northern	73								Ord. Stk.	—	—	—	—
Canada									Ord. Stk.	—	—	—	—
Canadian National	23,569	Sept., 1945	7,087,600	- 470,000	39	65,464,000	65,629,600	- 165,600	Ord. Stk.	—	—	—	—
Canadian Pacific	17,030	7.11.45	1,218,200	- 22,800	44	54,465,800	54,283,600	- 182,200	Ord. Stk.	17½	13½	20	2½
Various									Ord. Stk.	—	—	—	—
Barsi Light†	202	Sept., 1945	17,842	- 2,977	25	145,230	140,130	+ 5,100	Ord. Stk.	129½	97½	125½	£3 11/2
Beira	204	Aug., 1945	76,111	+ 9,694	48	846,863	889,876	- 53,013	B. Deb.	7½	5½	9½	£5 18/10
Egyptian Delta	607	10.10.45	17,865	- 2,831	28	308,189	348,417	- 40,228	Inc. Deb.	63½	58	68	Nil
Manila									Inc. Deb.	101½	99½	95½	£4 3/9
Midland of W. Australia	277	Sept., 1945	15,818	- 4,876	12	45,287	60,947	- 15,660	Pr. Sh.	—	—	—	—
Nigeria	1,900	23.6.45	50,627	- 14,001	12	835,979	777,161	+ 58,818	B. Deb.	—	—	—	—
Rhodesia	2,445	Aug., 1945	506,011	- 45,150	48	5,552,569	5,922,969	- 370,400	Inc. Deb.	—	—	—	—
South African	13,301	6.10.45	1,014,759	- 74,405	27	26,816,592	23,458,287	+ 3,358,305	Ord. Stk.	—	—	—	—
Victoria	4,774	April, 1945	1,285,324	+ 96,325	—	—	—	—	Ord. Stk.	—	—	—	—

Note. Yields are based on the approximate current price and are within a fraction of ½. Argentine traffics are given in sterling calculated @ 16 pesos to the £

† Receipts are calculated @ 1s. 6d. to the rupee.